Perturbative corrections and beta functions of “Natural swarms in 3.99 dimensions”

Effective parameters and couplings are given by

Parameter (symbol in this notebook)

w (w)

x (x)

$\theta^{\perp}$ (θp)

$\theta^{\parallel}$ (θl)

Φ_1 (Φ1)

Φ_2 (Φ2)

μ_1 (μ1)

μ_2 (μ2)

c_v (cv)

c_s (cσ)

f (f)

$\tilde{u}$ (u)

$\tilde{r}$ (r)

$\tilde{u}_\kappa$ (uκ)

$\hat{\eta}$ (η)

$\check{\eta}$ (ηt)

Beta functions for the effective parameters and coupling constants

The following notation has been used in the following definitions

- βP is the beta function of the parameter / coupling P

$$\beta w = -\Big(\Big(w\,\Big(-8\times(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)^3\,(-w-x+(-1+w+x)\,\eta)$$
$$(-1+\eta t)\,\theta p\,\Big(-3\,cv^2\,(1+w-w\,\eta)^2\,(w+x+\eta-(w+x)\,\eta)^2+$$
$$c\sigma^2\,(-1+\eta)\,\Big(x^2\,(-1+\eta)^2\,(-4+\mu 1\,(2+\eta+(-3+\eta)\,\mu 1))-x\,(-1+\eta)\times$$
$$\Big(-5+2\,\eta^2\,\mu 1\,(1+\mu 1)+\eta\,\Big(-8+4\,\mu 1-6\,\mu 1^2\Big)+\mu 1\,(-4+\mu 1-8\,\mu 2)-2\,\mu 2\Big)+$$
$$\eta\,\Big(-5+\eta^2\,\mu 1\,(1+\mu 1)+\eta\,(-4+(2-3\,\mu 1)\,\mu 1)+\mu 1\,(-4+\mu 1-13\,\mu 2)-\mu 2\Big)+$$
$$9\,w^3\,(-1+\eta)^3\,(1+2\,\mu 1\,\mu 2)+w^2\,(-1+\eta)^2\,(-14-\mu 1\,(6+\mu 1+36\,\mu 2)-\eta\,(13-$$

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                5 μ1 + μ2 + 13 μ1 μ2) + x (-1 + η) × (13 + 2 μ2 + μ1 (-4 + μ1 + 8 μ2))) +
        w (-1 + η) × (5 + x^2 (-1 + η)^2 (-2 + μ1)^2 - η^2 (-4 + μ1 (6 + μ1)) +
            μ1 (4 - μ1 + 18 μ2) + 2 x (-1 + η) × (-9 + η (-4 + 5 μ1) - 2 μ2 -
                2 μ1 (1 + μ1 + 4 μ2)) + 2 η (9 + μ2 + μ1 (2 + 2 μ1 + 13 μ2)))))) +
    f (2 w^5 (-1 + η)^5 (-3 x^2 (-1 + η)^2 (20 η^5 θp + 15 ηt θp + 2 η^3 (16 + 9 ηt)
            θp - 2 η^4 (9 + 10 ηt) θp +
            η (56 θp - 52 ηt θp - (-1 + ηt) θl (37 + 12 θp (-4 + Φ2))) +
            η^2 (-90 θp + 39 ηt θp - (-1 + ηt) θl (-37 + 24 θp (-4 + Φ2)))) +
        x (-1 + η) η (60 η^5 θp + 91 ηt θp + 6 η^3 (16 + 9 ηt) θp - 6 η^4 (9 + 10 ηt) θp +
            η (8 × (21 - 31 ηt) θp - (-1 + ηt) θl (65 + 36 θp (-4 + Φ2))) +
            η^2 ((-270 + 163 ηt) θp - (-1 + ηt) θl (-65 + 48 θp (-4 + Φ2)))) -
        2 η^2 θp (26 ηt + η (28 + 10 η^4 + η^2 (16 + 9 ηt) - η^3 (9 + 10 ηt) -
                3 ηt (21 + 2 θl (-4 + Φ2)) + η (-45 + ηt (38 - 6 θl (-4 + Φ2)) +
                    6 θl (-4 + Φ2)) + 6 θl (-4 + Φ2))) +
        2 x^3 (-1 + η)^3 ((-1 + η)^2 (28 + η (11 + 10 η - 10 ηt) - 11 ηt) θp -
            2 × (-1 + ηt) θl (13 + η (-13 + 12 θp (-4 + Φ2)) + 3 θp (-4 + Φ2))) +
        12 x^4 (-1 + η)^4 (-1 + ηt) θl θp (-4 + Φ2)) -
    8 w^6 (-1 + η)^6 (x + η - x η)^3 (-1 + ηt) θl θp (-4 + Φ2) +
    (x + η - x η)^2 (4 x^4 (-1 + η)^4 θp (-12 + 30 η^4 + 9 ηt -
            2 η^3 (39 - 5 θl + 5 ηt (2 + θl)) + 10 θl (4 + Φ2) - 10 ηt θl (4 + Φ2) +
            η (6 - 38 ηt - 39 θl + 39 ηt θl + 10 × (-1 + ηt) θl Φ2) +
            η^2 (54 - 19 θl + 2 θl Φ2 + ηt (49 + 19 θl - 2 θl Φ2)) -
        4 x (-1 + η) η (120 η^6 θp + 14 ηt θp - 8 η^5 (39 - 5 θl + 5 ηt (2 + θl)) θp +
            η^2 (-48 θp + 50 ηt θp + (-1 + ηt) θl (14 + θp (-134 + 33 Φ1 - 27 Φ2))) +
            4 η^3 θp (6 - 38 ηt - 39 θl + 39 ηt θl + 10 × (-1 + ηt) θl Φ2) +
            4 η^4 θp (54 + ηt (49 + θl (19 - 2 Φ2)) + θl (-19 + 2 Φ2)) + η (-28 ηt θp -
                (-1 + ηt) θl (14 + 33 θp Φ1 + 13 θp (2 + Φ2)))) + x^2 (-1 + η)^2
            (720 η^6 θp + 50 ηt θp - 48 η^5 (39 - 5 θl + 5 ηt (2 + θl)) θp + η^2 (-288
                θp + 266 ηt θp + (-1 + ηt) θl (60 + θp (-854 + 141 Φ1 - 187 Φ2))) -
            24 η^4 θp (-54 - 49 ηt + 19 θl - 19 ηt θl + 2 × (-1 + ηt) θl Φ2) +
            24 η^3 θp (6 - 38 ηt - 39 θl + 39 ηt θl + 10 × (-1 + ηt) θl Φ2) +
            η (-100 ηt θp - (-1 + ηt) θl (60 + 141 θp Φ1 + 53 θp (2 + Φ2)))) +
        η^2 θp (42 ηt + η (120 η^5 - 8 η^4 (39 - 5 θl + 5 ηt (2 + θl)) + η (-48 + 26 ηt (3 -
                    5 θl) + 130 θl + 39 × (-1 + ηt) θl Φ1 - 25 × (-1 + ηt) θl Φ2) +
                4 η^2 (6 - 38 ηt - 39 θl + 39 ηt θl + 10 × (-1 + ηt) θl Φ2) +
                3 θl (13 Φ1 + 5 × (2 + Φ2)) - 3 ηt (28 + 13 θl Φ1 + 5 θl (2 + Φ2)) +
                4 η^3 (54 + ηt (49 + θl (19 - 2 Φ2)) + θl (-19 + 2 Φ2)))) -
        8 x^3 (-1 + η)^3 (2 (-1 + η)^2 η (-12 + 2 η (-9 + 15 η - 10 ηt) + 9 ηt) θp -
            (-1 + ηt) θl (5 + 20 η^4 θp + 2 θp (2 + 3 Φ1 + Φ2) + 2 η^3 θp (-19 + 2 Φ2) -
                2 η^2 θp (39 + 10 Φ2) + η (-5 + 2 θp (38 - 3 Φ1 + 9 Φ2)))))) +
    3 w^4 (-1 + η)^4 (8 x^5 (-1 + η)^5 (-1 + ηt) θl θp (-4 + Φ2) + 4 x^4 (-1 + η)^4
        ((-1 + η)^2 (28 + η (11 + 10 η - 10 ηt) - 11 ηt) θp + 2 × (-1 + ηt) θl
            (-4 + η (4 + θp (26 + 3 Φ1 - 2 Φ2)) - 3 θp (-2 + Φ1 + 2 Φ2))) +
        x^2 (-1 + η)^2 (240 η^6 θp + 90 ηt θp - 48 η^5 (2 + 5 ηt) θp +
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        12 η^4 (23 + 8 ηt) θp - 2 η (48 + 47 ηt) θp - 6 η (-1 + ηt) θl
          (37 + 4 θp (8 + Φ2)) + η^2 (996 θp - 466 ηt θp - (-1 + ηt) θl
             (-86 + 9 θp (-82 + 13 Φ1 + 29 Φ2))) + η^3 (2 × (-660 + 307 ηt) θp +
            (-1 + ηt) θl (136 + θp (446 + 117 Φ1 + 37 Φ2)))) - x (-1 + η) η
      (160 η^6 θp + 182 ηt θp + 4 η^4 (37 + 6 ηt) θp - 24 η (4 + 11 ηt) θp -
        8 η^5 (3 + 20 ηt) θp - 2 η (-1 + ηt) θl (65 + 12 θp (8 + Φ2)) +
        η^3 (-960 θp + 532 ηt θp + (-1 + ηt) θl (58 + θp (190 + 69 Φ1 + 29 Φ2))) +
        η^2 (772 θp - 314 ηt θp - 3 × (-1 + ηt) θl
             (-24 + θp (-214 + 23 Φ1 + 55 Φ2)))) - x^3 (-1 + η)^3
      (4 (-1 + η)^2 (-8 + η (123 + 2 η (27 + 20 η - 20 ηt) - 54 ηt) + 7 ηt)
          θp + (-1 + ηt) θl (-8 × (13 + θp (8 + Φ2)) + η^2 (110 +
                θp (458 + 87 Φ1 + 7 Φ2)) - 3 η (2 + θp (-114 + 29 Φ1 + 61 Φ2)))) +
    η^2 θp (104 ηt + η (-32 + 40 η^5 + η^4 (4 - 40 ηt) - 4 η^3 (-7 + ηt) +
            8 θl (8 + Φ2) - 2 ηt (83 + 4 θl (8 + Φ2)) + η^2 (-260 - θl (26 + 15 Φ1 +
                7 Φ2) + ηt (170 + θl (26 + 15 Φ1 + 7 Φ2))) + η (220 + 3 θl
               (-66 + 5 Φ1 + 13 Φ2) - ηt (64 + 3 θl (-66 + 5 Φ1 + 13 Φ2))))))) -
w (x (-1 + η) - η) (-1 + η) × (4 x^4 (-1 + η)^4 (-(-1 + η)^2
          (3 η (-58 + 85 η + 50 η^2) - 10 η (7 + 15 η) ηt + 9 × (-4 + 3 ηt)) θp +
        (-1 + ηt) θl (30 - 30 η + 5 η^3 θp (37 + 2 Φ2) + 6 θp (24 + 6 Φ1 + 7 Φ2) -
            4 η^2 θp (173 + 16 Φ2) + 3 η θp (73 - 12 Φ1 + 16 Φ2))) + 4 x^5 (-1 + η)^5
      θp (30 η^4 - 3 η^3 (9 + 10 ηt) + η (81 - 26 ηt - 127 θl + 127 ηt θl + 14 ×
             (-1 + ηt) θl Φ2) - 2 × (12 + ηt - 9 θl (4 + Φ2) + 9 ηt θl (4 + Φ2)) +
        η^2 (-60 + 31 θl + 2 θl Φ2 + ηt (58 - 31 θl - 2 θl Φ2))) +
    x^3 (-1 + η)^3 (2 (-1 + η)^2 (12 η (-24 + η (-76 + 5 η (23 + 10 η))) + 75 ηt -
            8 η (-27 + 65 η + 75 η^2) ηt) θp - (-1 + ηt) θl (40 η^4 θp (43 + 2 Φ2) -
            8 η^3 θp (749 + 58 Φ2) + η^2 (-300 - 567 θp Φ1 + 33 θp (18 + Φ2)) + 24 ×
             (4 + θp (2 + 3 Φ1 + Φ2)) + 3 η (68 + θp (762 + 165 Φ1 + 221 Φ2)))) -
    x^2 (-1 + η)^2 (1200 η^7 θp + 120 η^6 (9 - 10 ηt) θp + 92 ηt θp +
        8 η^4 θp (891 + 311 ηt - 806 θl + 806 ηt θl + 52 × (-1 + ηt) θl Φ2) +
        η (134 ηt θp - (-1 + ηt) θl (234 + 189 θp Φ1 + 53 θp (2 + Φ2))) -
        8 η^5 θp (1002 - 5 θl (49 + 2 Φ2) + 5 ηt (-22 + θl (49 + 2 Φ2))) +
        η^3 (-2 × (264 + 1249 ηt) θp + 3 × (-1 + ηt) θl
             (116 + 3 θp (62 + 91 Φ1 + 35 Φ2))) - 2 η^2 ((432 - 52 ηt) θp +
            (-1 + ηt) θl (57 + θp (1702 + 315 Φ1 + 491 Φ2))) +
    x (-1 + η) η (600 η^7 θp + 300 η^6 (3 - 2 ηt) θp + 190 ηt θp +
        4 η^4 θp (1053 + 458 ηt - 863 θl + 863 ηt θl + 46 × (-1 + ηt) θl Φ2) -
        2 η (43 ηt θp + (-1 + ηt) θl (87 + 81 θp Φ1 + 17 θp (2 + Φ2))) -
        4 η^5 θp (1236 - 5 θl (55 + 2 Φ2) + 5 ηt (-10 + θl (55 + 2 Φ2))) +
        η^3 (-2 × (96 + 785 ηt) θp + 3 × (-1 + ηt) θl
             (56 + θp (278 + 171 Φ1 + 107 Φ2))) + η^2 (-576 θp + 34 ηt θp -
            (-1 + ηt) θl (-6 + θp (2254 + 351 Φ1 + 647 Φ2)))) +
    η^2 θp (-134 ηt + η (-120 η^6 + 12 η^5 (-21 + 10 ηt) - 5 θl (2 + 9 Φ1 + Φ2) +
            4 η^4 (294 + 2 ηt - 61 θl + 61 ηt θl + 2 × (-1 + ηt) θl Φ2) +
            ηt (142 + 5 θl (2 + 9 Φ1 + Φ2)) + η^2 (24 + 338 ηt +
                3 θl (90 + 39 Φ1 + 31 Φ2) - 3 ηt θl (90 + 39 Φ1 + 31 Φ2)) -
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            4 η^3 (243 - 8 θl (23 + Φ2) + ηt (121 + 8 θl (23 + Φ2))) + 2 η (72 -
              4 θl (70 + 9 Φ1 + 20 Φ2) + ηt (5 + 4 θl (70 + 9 Φ1 + 20 Φ2)))))) +
w^2 (-1 + η)^2 (4 x^6 (-1 + η)^6 θp (28 + 10 η^4 - 11 ηt + η^2 (16 + 9 ηt) -
      η^3 (9 + 10 ηt) - 16 θl + 16 ηt θl - 10 × (-1 + ηt) θl Φ2 +
      η (-45 - 4 θl (2 + Φ2) + 4 ηt (3 + θl (2 + Φ2)))) - 12 x^5 (-1 + η)^5
    ((-1 + η)^2 (η (89 + 4 η (13 + 5 η - 5 ηt) - 52 ηt) - 2 × (12 + ηt)) θp +
      (-1 + ηt) θl (η (10 + θp (167 + 12 Φ1 - 2 Φ2)) + 3 η^2 θp (-5 + 2 Φ2) -
        2 × (5 + θp (40 + 6 Φ1 + 11 Φ2))) - x (-1 + η) η
    (240 η^8 θp + 12 η^6 (17 - 132 ηt) θp + 48 η^7 (33 - 5 ηt) θp + 182 ηt θp -
      12 η^5 θp (702 - 234 ηt - 179 θl + 179 ηt θl + 2 × (-1 + ηt) θl Φ2) +
      2 η (304 ηt θp + (-1 + ηt) θl (-65 + 24 θp (2 + Φ2))) +
      6 η^4 (2 × (677 + 79 ηt) θp + (-1 + ηt) θl
          (28 + θp (1568 + 105 Φ1 + 125 Φ2))) - η^2 (576 θp + 910 ηt θp +
         (-1 + ηt) θl (392 + 3 θp (750 + 207 Φ1 + 215 Φ2))) - 3 η^3 (4 × (96 +
            151 ηt) θp + (-1 + ηt) θl (-118 + θp (902 + 3 Φ1 + 243 Φ2)))) +
  3 x^4 (-1 + η)^4 (2 (-1 + η)^2 (-24 + 43 ηt + 2 η (5 η (67 + η (41 +
                10 η - 10 ηt) - 41 ηt) - 6 × (23 + 5 ηt))) θp + (-1 + ηt)
      θl (20 η^3 θp (-25 + 2 Φ2) - 8 × (12 + θp (26 + 9 Φ1 + 8 Φ2)) +
         η^2 (140 + θp (3106 + 237 Φ1 + 157 Φ2)) -
         η (44 + θp (1406 + 165 Φ1 + 381 Φ2)))) +
  3 x^2 (-1 + η)^2 (200 η^8 θp + 20 η^7 (51 - 10 ηt) θp + 30 ηt θp -
      20 η^6 (2 + 51 ηt) θp + 4 η^5 (-1293 + 520 ηt - 330 × (-1 + ηt) θl) θp +
      2 η (111 ηt θp + (-1 + ηt) θl (-37 + 8 θp (2 + Φ2))) +
      4 η^4 (2 × (637 + 15 ηt) θp + (-1 + ηt) θl
          (43 + θp (1550 + 111 Φ1 + 121 Φ2))) - η^2 (6 × (48 + 19 ηt) θp +
         (-1 + ηt) θl (334 + θp (1166 + 351 Φ1 + 343 Φ2))) -
      η^3 (2 × (408 + 559 ηt) θp + (-1 + ηt) θl (-236 +
            θp (2114 + 93 Φ1 + 565 Φ2)))) - x^3 (-1 + η)^3
    (4 (-1 + η)^2 (2 η (-72 + η (-468 + 5 η (191 + 4 η (28 + 5 η)))) +
          (69 - 5 η (-45 + 4 η (15 + 2 η (28 + 5 η)))) ηt) θp +
      (-1 + ηt) θl (40 η^4 θp (-89 + 2 Φ2) + 8 × (-13 + 2 θp (2 + Φ2)) +
         2 η^3 (324 + θp (9238 + 693 Φ1 + 653 Φ2)) - 3 η^2 (-114 + θp (2450 +
               201 Φ1 + 657 Φ2)) - η (886 + θp (2414 + 783 Φ1 + 727 Φ2)))) +
  η^2 θp (104 ηt + η (40 η^7 + 4 η^5 (25 - 81 ηt) + η^6 (324 - 40 ηt) + 6 η^2
          (-36 + ηt (-55 + θl (-76 + 3 Φ1 - 21 Φ2)) + θl (76 - 3 Φ1 + 21 Φ2)) +
         η^4 (-1836 + 460 θl + 8 θl Φ2 + ηt (504 - 460 θl - 8 θl Φ2)) +
         2 × (-8 θl (2 + Φ2) + ηt (97 + 8 θl (2 + Φ2))) +
         η^3 (1732 - θl (1906 + 117 Φ1 + 149 Φ2) + ηt
               (358 + θl (1906 + 117 Φ1 + 149 Φ2))) + η (-144 + θl (542 + 135
                Φ1 + 151 Φ2) - ηt (466 + θl (542 + 135 Φ1 + 151 Φ2))))))) +
w^3 (-1 + η)^3 (8 x^6 (-1 + η)^6 (-1 + ηt) θl θp (-4 + Φ2) + 4 x^5 (-1 + η)^5
    ((3 (-1 + η)^2 (28 + η (11 + 10 η - 10 ηt) - 11 ηt) θp + 2 × (-1 + ηt)
      θl (-5 + θp (20 - 6 Φ1 - 17 Φ2) + η (5 + 2 θp (20 + 3 Φ1 + Φ2))) -
  x^4 (-1 + η)^4 (2 (-1 + η)^2 (-144 + 6 η (173 + 5 η (17 + 10 η - 10 ηt) - 85 ηt) +
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                13 η t) θp + (-1 + η t) θl (η (148 + θp (2458 - 21 Φ1 - 445 Φ2)) -
                72 × (4 + θp (14 + 3 Φ1 + 4 Φ2)) +
                η^2 (140 + θp (758 + 237 Φ1 + 181 Φ2))) + x (-1 + η) η
            (600 η^7 θp + 12 η^5 (2 - 75 η t) θp + 300 η^6 (3 - 2 η t) θp + 546 η t θp +
              6 η (-2 × (12 + η t) θp + (-1 + η t) θl (-65 + 4 θp (-8 + Φ2))) + η^3 (6216
                θp - 628 η t θp + (-1 + η t) θl (466 + θp (7354 + 411 Φ1 + 83 Φ2))) +
              2 η^4 (2 × (-1629 + 851 η t) θp + (-1 + η t) θl (28 + θp
                    (-386 + 105 Φ1 + 89 Φ2))) + η^2 (-10 × (108 + 181 η t) θp -
                3 × (-1 + η t) θl (44 + θp (1170 + 207 Φ1 + 335 Φ2))) ) -
          x^2 (-1 + η)^2 (1200 η^7 θp + 24 η^5 (14 - 45 η t) θp + 120 η^6 (9 - 10 η t)
              θp + 270 η t θp + η^3 (6 × (1640 - 361 η t) θp +
                (-1 + η t) θl (1052 + θp (11 470 + 609 Φ1 - 127 Φ2))) +
              6 η (3 × (-8 + 23 η t) θp + (-1 + η t) θl (-111 + 4 θp (-8 + Φ2))) +
              4 η^4 (9 × (-296 + 155 η t) θp + (-1 + η t) θl
                  (43 + θp (-142 + 111 Φ1 + 97 Φ2))) - 3 η^2 (6 × (92 + 101 η t) θp +
                (-1 + η t) θl (186 + θp (1842 + 351 Φ1 + 527 Φ2))) ) +
          x^3 (-1 + η)^3 (4 (-1 + η)^2 (-12 + 6 η (-51 + η (211 + 5 η (23 + 10 η))) +
                78 η t - 5 η (1 + 6 η (23 + 10 η)) η t) θp +
              (-1 + η t) θl (η^2 (774 + θp (8206 + 321 Φ1 - 479 Φ2)) +
                8 × (-39 + θp (-8 + Φ2)) + η^3 (216 + θp (420 + 462 Φ1 + 398 Φ2)) -
                η (678 + θp (3858 + 783 Φ1 + 1103 Φ2))) ) +
          η^2 θp (-312 η t + η (48 - 120 η^6 + 186 η t + 12 η^5 (-21 + 10 η t) +
                12 η^4 (1 + 21 η t) + 8 θl (-8 + Φ2) - 8 η t θl (-8 + Φ2) - 2 η^2 (762 -
                    4 θl (224 + 12 Φ1 + 5 Φ2) + η t (35 + 4 θl (224 + 12 Φ1 + 5 Φ2))) +
                η^3 (1572 + θl (-254 + 39 Φ1 + 31 Φ2) - η t (802 + θl (-254 +
                          39 Φ1 + 31 Φ2))) + η (264 - θl (834 + 135 Φ1 + 239 Φ2) +
                    η t (626 + θl (834 + 135 Φ1 + 239 Φ2))))))))) /
(96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (w + x + η - (w + x) η)^3
  (-1 +
    η t) θp))
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\begin{aligned}
\beta x = \frac{1}{12}\Bigg(&-\frac{1}{(-1+w(-1+\eta))^2\,(w+x+\eta-(w+x)\,\eta)^2}\\
&c\sigma^2\,(-1+\eta)\,\Big(x^3\,(-1+\eta)^2\,(-4+\mu1\,(2+\eta+(-3+\eta)\,\mu1))+\\
&\quad\eta\,\big((1+\mu1)\times(4+5\,\eta+(4+\eta\,(3+\eta))\,\mu1)+(11+6\,\eta+(11+6\,\eta\,(2+\eta))\,\mu1)\,\mu2+\\
&\qquad 9\,\mu2^2\big)+9\,w^3\,(-1+\eta)^3\,\big(-1+x-2\,\mu2+2\,x\,\mu1\,\mu2-\mu2^2-\mu1\,(2+\mu1+4\,\mu2)\big)+\\
&\quad x\,\big(4\,(1+\mu1)^2+10\times(1+\mu1)\,\mu2+9\,\mu2^2-\eta^3\,\mu1\,(1+\mu1+12\,\mu2)-\\
&\qquad\eta^2\,\big(14+12\,\mu1+7\,\mu1^2+12\times(1+\mu1)\,\mu2\big)+\\
&\qquad\eta\,\big(1+3\,\mu1^2+\mu2-9\,\mu2^2+\mu1\,(4+\mu2)\big)\big)-x^2\,(-1+\eta)\,\big(\eta^2\,\mu1\,(1+\mu1-6\,\mu2)+\\
&\qquad 4\times(1+\mu1)\,(\mu1+\mu2)-\eta\,(13+6\,\mu2+\mu1\,(3+8\,\mu1+6\,\mu2))\big)\big)+\\
&\quad w^2\,(-1+\eta)^2\,\big((1+\mu1)\times(13+11\,\mu1+\eta\,(14+15\,\mu1))+\\
&\qquad(30+23\,\eta+36\,\mu1+65\,\eta\,\mu1)\,\mu2+9\times(2+\eta)\,\mu2^2+\\
&\qquad x^2\,(-1+\eta)\times(13+2\,\mu2+\mu1\,(-4+\mu1+8\,\mu2))+x\,\big((\mu1+\mu2)\,(22+13\,\mu1+9\,\mu2)-\\
&\qquad\quad\eta\,\big(27+\mu1\,(23+14\,\mu1)+23\,\mu2+71\,\mu1\,\mu2+9\,\mu2^2\big)\big)\big)+w\,(-1+\eta)\\
&\quad\big(x^3\,(-1+\eta)^2\,(-2+\mu1)^2-(1+\mu1)\times(4\times(1+\mu1)+\eta\,(18+5\,\eta+7\times(2+\eta)\,\mu1))-\\
&\qquad 2\times(6\times(1+\mu1)+\eta\,(17+23\,\mu1+3\,\eta\,(1+6\,\mu1)))\,\mu2-9\times(1+2\,\eta)\,\mu2^2-\\
&\qquad x^2\,(-1+\eta)\times\big(13-2\,\mu2-\mu1\,(6+\mu1+8\,\mu2)+\eta\,\big(13+5\,\mu1^2+6\,\mu2+24\,\mu1\,\mu2\big)\big)+\\
&\qquad x\,\big(-13-15\,\mu1^2-2\,\mu2\,(16+9\,\mu2)-2\,\mu1\,(14+13\,\mu2)+2\\
&\qquad\quad\eta\,\big(13+3\,\mu1^2+\mu1\,(7+5\,\mu2)+\mu2\,(11+9\,\mu2)\big)+\eta^2\\
&\qquad\quad(2\times(7+6\,\mu2)+\mu1\,(16+11\,\mu1+60\,\mu2))\big)\big)\big)+f\,\theta l\,(2+x\,(-4+\Phi2)+\Phi2)\Bigg)
\end{aligned}
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\begin{aligned}
&\beta\theta p =\\
&-\Big(\Big(-cv\,c\sigma\,x\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta)\,\big(x^2\,(-1+\eta)^2+\eta\,(1+\eta)+x\,\big(1+\eta-2\,\eta^2\big)\big)^2\\
&\quad\big((x+\eta-x\,\eta)^2\,(-1+\eta t)\,\theta l\,\theta p\,(1+\mu1)\times(14\,x\,(-1+\eta)-14\,\eta-5\times(2+\Phi1+\Phi2))+\\
&\quad w\,(-1+\eta)\times\big(-4\,x^3\,(-1+\eta)^3\,\theta p\\
&\qquad\big(1-8\,\theta l+7\,\mu1-14\,\theta l\,\mu1+3\,\eta^2\,(1+\mu1)-\eta\,\eta t\,(1+2\,\theta l)\times(1+\mu1)+2\,\eta\\
&\qquad\quad(-2+\theta l-5\,\mu1+\theta l\,\mu1)+\eta t\,(1+8\,\theta l+\mu1+14\,\theta l\,\mu1)\big)+x^2\,(-1+\eta)^2\,\theta p\\
&\qquad\big(36\,\eta^3\,(1+\mu1)-12\,\eta^2\,(\eta t\,(1+2\,\theta l)\times(1+\mu1)-2\times(-2+\theta l-5\,\mu1+\theta l\,\mu1))+\\
&\qquad\quad 12\,\eta\,(1+7\,\mu1-2\,\theta l\,(4+7\,\mu1)+\eta t\,(1+\mu1+2\,\theta l\,(4+7\,\mu1)))+\\
&\qquad\quad(-1+\eta t)\,\theta l\,(1+\mu1)\times(58+15\,\Phi1+15\,\Phi2)\big)-x\,(-1+\eta)\times\\
&\qquad\big(12\times(-1+\eta)\,\eta^2\,\theta p\,(-1-7\,\mu1+3\,\eta\,(1+\mu1)-\eta t\,(1+\mu1))-(-1+\eta t)\,\theta l\\
&\qquad\quad\big(20\times(1+\mu1)+\theta p\,\big(24\,\eta^3\,(1+\mu1)-24\,\eta^2\,(4+7\,\mu1)+5\times(-6-3\,\Phi1+\Phi2)-\\
&\qquad\qquad 2\,\eta\,(1+\mu1)\times(58+15\,\Phi1+15\,\Phi2)-\mu1\,(30+15\,\Phi1+19\,\Phi2)\big)\big)\big)+\\
&\qquad\theta p\,\big(12\,\eta^5\,(1+\mu1)+20\,\eta t\,(1+\mu1)-4\,\eta^4\,(\eta t\,(1+2\,\theta l)\times(1+\mu1)-2\times\\
&\qquad\qquad(-2+\theta l-5\,\mu1+\theta l\,\mu1))+4\,\eta^3\,(1+7\,\mu1-2\,\theta l\,(4+7\,\mu1)+\eta t\,(1+\mu1+\\
&\qquad\qquad 2\,\theta l\,(4+7\,\mu1)))+\eta^2\,(-1+\eta t)\,\theta l\,(1+\mu1)\times(58+15\,\Phi1+15\,\Phi2)+\\
&\qquad\quad\eta\,(-20\,\eta t\,(1+\mu1)-5\,\theta l\,(6+3\,\Phi1-\Phi2)-\theta l\,\mu1\,(30+15\,\Phi1+19\,\Phi2)+\\
&\qquad\qquad\eta t\,\theta l\,(5\times(6+3\,\Phi1-\Phi2)+\mu1\,(30+15\,\Phi1+19\,\Phi2)))\big)\big)+w^4\,(-1+\eta)^4\\
&\quad\big(x\,(-1+\eta)\times(4\times(-1+\eta)\,\theta p\,(1-5\,\mu1+\eta\,(1+\mu1)-\eta t\,(1+\mu1))+(-1+\eta t)\\
&\qquad\theta l\,(-20\times(1+\mu1)+5\,\theta p\,(8+3\,\Phi1-\Phi2)+\theta p\,\mu1\,(64+15\,\Phi1+19\,\Phi2)))+\\
&\quad\theta p\,\big(-4\,\eta^3\,(1+\mu1)-20\,\eta t\,(1+\mu1)+4\,\eta^2\,(\eta t+6\,\mu1+\eta t\,\mu1)+\eta\,(4-20\,\mu1+\\
&\qquad 16\,\eta t\,(1+\mu1)+\theta l\,(40+64\,\mu1+15\,\Phi1+15\,\mu1\,\Phi1-5\,\Phi2+19\,\mu1\,\Phi2)-\\
&\qquad\eta t\,\theta l\,(5\times(8+3\,\Phi1-\Phi2)+\mu1\,(64+15\,\Phi1+19\,\Phi2)))\big)+
\end{aligned}
$$

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w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (-2 - 5 θl + 10 μ1 - 17 θl μ1 + 2 η^2
        (1 + μ1) - 2 η (ηt + 6 μ1 + ηt μ1) + ηt (2 + 5 θl + 2 μ1 + 17 θl μ1)) -
    x^2 (-1 + η)^2 θp (8 - 94 θl + 56 μ1 - 142 θl μ1 + 12 η^3 (1 + μ1) + 8 ηt (1 + μ1) -
        12 η^2 (-2 + ηt + 4 μ1 + ηt μ1) + 2 η (-22 - 7 θl - 10 μ1 - 43 θl μ1 +
          ηt (2 + 7 θl + 2 μ1 + 43 θl μ1)) - 15 θl Φ1 - 15 θl μ1 Φ1 - 15 θl Φ2 - 15
        θl μ1 Φ2 + ηt θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))) +
    x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) - 3 η (-5 + ηt + μ1 + ηt μ1) -
          4 × (1 + ηt + 7 μ1 + ηt μ1)) + (-1 + ηt) θl (-60 × (1 + μ1) +
          θp (104 + η^2 (-2 + 70 μ1) + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2) +
            2 η (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))))) +
    θp (-4 η^5 (1 + μ1) - 60 ηt (1 + μ1) + 4 η^4 (-6 + ηt + ηt μ1) + η^3
        (36 + 60 μ1 + 6 θl (-1 + 3 μ1) + ηt (4 + 6 θl + 4 μ1 - 18 θl μ1)) + η
        (60 ηt (1 + μ1) + θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2)) -
          ηt θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2))) - η^2
        (8 + 56 μ1 - θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)) + ηt
          (8 × (1 + μ1) + θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))))) +
w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (-8 - 30 θl + 40 μ1 - 78 θl μ1 + 8 η^2 (1 + μ1) -
        8 η (ηt + 6 μ1 + ηt μ1) - 5 θl Φ1 - 5 θl μ1 Φ1 - 5 θl Φ2 - 5 θl μ1 Φ2 + ηt
        (8 × (1 + μ1) + 5 θl (6 + Φ1 + Φ2) + θl μ1 (78 + 5 Φ1 + 5 Φ2))) -
    x (-1 + η) × (4 × (-1 + η) θp (-1 - 7 μ1 + 4 η^2 (1 + μ1) - ηt (1 + μ1) -
          η (-7 + 17 μ1 + 4 ηt (1 + μ1))) + (-1 + ηt) θl
        (-60 × (1 + μ1) + θp (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2) +
            2 η (26 + 5 Φ1 + 5 Φ2 + μ1 (74 + 5 Φ1 + 5 Φ2))))) +
    θp (8 η^4 (1 + μ1) + 60 ηt (1 + μ1) - 4 η^3 (-3 + 9 μ1 + 2 ηt (1 + μ1)) +
        η^2 (-24 - θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)) +
          ηt (4 × (1 + μ1) + θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)))) + η (4 + 28
          μ1 - θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2)) + ηt (-56 × (1 +
            μ1) + θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2))))))) -
(1 + x + η - x η)^2 θl (24 cv^2 x (-1 + w (-1 + η))^3 (x + η - x η)^3
    (w + x + η - w η - x η)^3 (-1 + ηt) θp +
f (-4 w^6 (-1 + η)^6 (x + η - x η)^3 (-1 + ηt) θl θp (2 + Φ2) ×
      (-2 + θp (2 + Φ2)) + 2 w^5 (-1 + η)^5
      (6 η^3 (1 + η) × (-1 + ηt) θl θp (2 + Φ2) × (-2 + θp (2 + Φ2)) + 2 x^4 (-1 + η)^4
          ((-1 + η) θp (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) +
            (-1 + ηt) θl (-12 + 5 Φ2 + 3 θp^2 (2 + Φ2)^2 + 3 θp (18 + 3 Φ1 + Φ2))) - x^3
          (-1 + η)^3 (60 η^4 θp + 6 η^2 θp (-69 + ηt (-5 + Φ2) - 4 Φ2) - 6 η^3 θp
            (-5 + 10 ηt + Φ2) + η (θp (324 + 59 ηt + 30 Φ2 + 4 ηt Φ2) + (-1 + ηt)
              θl (-41 + 20 Φ2 + 24 θp^2 (2 + Φ2)^2 + 6 θp (50 + 9 Φ1 + Φ2))) +
          θp (-6 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (31 - 10 Φ2 +
                6 θl (2 + Φ2) × (-2 + θp (2 + Φ2))))) + x^2 (-1 + η)^2
          η (60 η^4 θp + 6 η^2 θp (-69 + ηt (-5 + Φ2) - 4 Φ2) - 6 η^3 θp
            (-5 + 10 ηt + Φ2) + η (θp (324 + 29 ηt + 30 Φ2 + 14 ηt Φ2) + (-1 + ηt)
              θl (-11 + 18 θp (14 + 3 Φ1 - Φ2) + 10 Φ2 + 36 θp^2 (2 + Φ2)^2)) +
          θp (-18 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (61 - 20 Φ2 +
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                18 θl (2 + Φ2) × (-2 + θp (2 + Φ2)))))) - 2
        x (-1 + η) η^2 θp (10 η^4 + η^2 (-69 + ηt (-5 + Φ2) - 4 Φ2) -
          η^3 (-5 + 10 ηt + Φ2) - 9 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) +
          ηt (12 - 5 Φ2 + 9 θl (2 + Φ2) × (-2 + θp (2 + Φ2))) +
          η (54 + 5 Φ2 - 3 θl (6 + 3 Φ1 - 5 Φ2 + 4 θp (2 + Φ2)^2) +
             ηt (3 + 4 Φ2 + 3 θl (6 + 3 Φ1 - 5 Φ2 + 4 θp (2 + Φ2)^2)))))) -
    (x + η - x η)^2 (4 η^4 (-1 + ηt) θl θp (2 + Φ2) × (-2 + θp (2 + Φ2)) - 2
        x^5 (-1 + η)^5 θp (108 + 60 η^3 - 108 θl + 6 Φ2 - 20 θl Φ2 -
          5 θl Φ2^2 - 2 ηt (5 + Φ2) - 4 η^2 (20 - 5 θl + 5 ηt (2 + θl) + Φ2) -
          2 η (44 + 5 θl + ηt (-25 + θl (-5 + Φ2) - Φ2) + Φ2 - θl Φ2) +
          ηt θl (108 + 20 Φ2 + 5 Φ2^2)) + 2 x^2 (-1 + η)^2 η
        (240 η^5 θp + 4 ηt θp (13 - 5 Φ2) - 16 η^4 θp (20 - 5 θl + 5 ηt (2 + θl) + Φ2) -
          8 η^3 θp (44 + ηt (-25 + θl (-5 + Φ2) - Φ2) - θl (-5 + Φ2) + Φ2) +
          4 η^2 θp (-2 ηt (5 + Φ2) + 6 × (18 + Φ2) - θl (108 + 20 Φ2 + 5 Φ2^2) +
             ηt θl (108 + 20 Φ2 + 5 Φ2^2)) + η (4 ηt θp (-13 + 5 Φ2) +
             (-1 + ηt) θl (12 θp^2 (2 + Φ2)^2 + 2 × (-6 + 5 Φ2) +
                θp (16 + 66 Φ1 - 22 Φ2 - 15 Φ2^2)))) - x^3 (-1 + η)^3 (720 η^5 θp +
          10 ηt θp (3 - 2 Φ2) - 48 η^4 θp (20 - 5 θl + 5 ηt (2 + θl) + Φ2) -
          24 η^3 θp (44 + ηt (-25 + θl (-5 + Φ2) - Φ2) - θl (-5 + Φ2) + Φ2) +
          12 η^2 θp (-2 ηt (5 + Φ2) + 6 × (18 + Φ2) -
             θl (108 + 20 Φ2 + 5 Φ2^2) + ηt θl (108 + 20 Φ2 + 5 Φ2^2)) +
          η (10 ηt θp (-3 + 2 Φ2) + (-1 + ηt) θl (16 θp^2 (2 + Φ2)^2 +
                20 × (-5 + 2 Φ2) + 3 θp (22 + 47 Φ1 - 9 Φ2 - 10 Φ2^2)))) - 2 x^4
        (-1 + η)^4 (-8 × (-1 + η) η θp (30 η^2 + ηt (5 + Φ2) - 3 × (18 + Φ2) -
             2 η (5 + 10 ηt + Φ2)) - (-1 + ηt) θl (10 × (-2 + Φ2) +
             2 θp^2 (2 + Φ2)^2 + θp (12 - 80 η^3 + 24 Φ1 - 8 η^2 (-5 + Φ2) - 4 Φ2 -
                5 Φ2^2 + 4 η (108 + 20 Φ2 + 5 Φ2^2)))) - x (-1 + η) η^2 θp
        (120 η^5 + 38 ηt - 20 ηt Φ2 - 8 η^4 (20 - 5 θl + 5 ηt (2 + θl) + Φ2) -
          4 η^3 (44 + ηt (-25 + θl (-5 + Φ2) - Φ2) - θl (-5 + Φ2) + Φ2) +
          2 η^2 (-2 ηt (5 + Φ2) + 6 × (18 + Φ2) -
             θl (108 + 20 Φ2 + 5 Φ2^2) + ηt θl (108 + 20 Φ2 + 5 Φ2^2)) +
          η (θl (26 - 39 Φ1 + 33 Φ2 + 10 Φ2^2 - 16 θp (2 + Φ2)^2) + ηt (-38 +
                20 Φ2 + θl (-26 + 39 Φ1 - 33 Φ2 - 10 Φ2^2 + 16 θp (2 + Φ2)^2))))) +
    w^2 (-1 + η)^2 (-12 η^4 (1 + 3 η + η^2) × (-1 + ηt) θl θp (2 + Φ2) ×
        (-2 + θp (2 + Φ2)) + 2 x^7 (-1 + η)^7 θp (108 + 20 η^3 - 108 θl +
          2 η (-69 + ηt (-5 + Φ2) - 4 Φ2) + 10 Φ2 - 16 θl Φ2 - 5 θl Φ2^2 -
          2 η^2 (-5 + 10 ηt + Φ2) + ηt (30 - 2 Φ2 + θl (108 + 16 Φ2 + 5 Φ2^2))) - 6 x^6
        (-1 + η)^6 (2 × (-1 + η) θp (20 η^3 + η (-63 + 2 ηt (-30 + Φ2) - 13 Φ2) +
             2 × (-74 + ηt (-5 + Φ2) - 4 Φ2) - 2 η^2 (-30 + 10 ηt + Φ2)) +
          (-1 + ηt) θl (10 × (-2 + Φ2) + 2 θp^2 (2 + Φ2)^2 + θp
                (308 + 24 Φ1 + 32 Φ2 + 5 Φ2^2 + 2 η (73 + 15 Φ2 + 5 Φ2^2)))) - x^2
        (-1 + η)^2 η (240 η^7 θp + 12 η^5 θp (57 + 2 ηt (-80 + Φ2) - 23 Φ2) +
          2 ηt θp (61 - 20 Φ2) - 24 η^6 θp (-80 + 10 ηt + Φ2) +
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        3 η^2 (8 θp (6 × (18 + Φ2) + ηt (-34 + 3 Φ2)) + (-1 + ηt) θl (-58 + 40 Φ2 +
              120 θp^2 (2 + Φ2)^2 + θp (814 + 351 Φ1 - 25 Φ2 - 40 Φ2^2))) +
        2 η (ηt θp (497 - 160 Φ2) + (-1 + ηt) θl (-11 + 10 Φ2 +
              36 θp^2 (2 + Φ2)^2 + 3 θp (-24 + 18 Φ1 - 22 Φ2 - 5 Φ2^2))) +
        12 η^4 θp (-1017 - 23 Φ2 + θl (107 - 11 Φ2 - 5 Φ2^2) +
            ηt (50 + 8 Φ2 + θl (-107 + 11 Φ2 + 5 Φ2^2))) + 6 η^3 (2 θp
             (564 + 36 Φ2 + 7 ηt (15 + 2 Φ2)) + (-1 + ηt) θl (30 θp^2 (2 + Φ2)^2 +
              2 × (-6 + 5 Φ2) + θp (1502 + 105 Φ1 + 113 Φ2 + 25 Φ2^2)))) +
    x^3 (-1 + η)^3 (600 η^7 θp + 2 ηt θp (31 - 10 Φ2) + 60 η^5 θp
         (-3 + ηt (-65 + Φ2) - 10 Φ2) - 60 η^6 θp (-65 + 10 ηt + Φ2) +
        9 η^2 (θp (24 × (18 + Φ2) - 2 ηt (43 + 4 Φ2)) + (-1 + ηt) θl (-96 +
              40 Φ2 + 40 θp^2 (2 + Φ2)^2 + θp (506 + 189 Φ1 + 37 Φ2 - 20 Φ2^2))) +
        2 η (10 ηt θp (59 - 17 Φ2) + (-1 + ηt) θl (-41 + 20 Φ2 +
              24 θp^2 (2 + Φ2)^2 + 3 θp (-8 + 18 Φ1 - 14 Φ2 - 5 Φ2^2))) +
        6 η^4 θp (-3800 - 74 Φ2 - 5 θl (-56 + 12 Φ2 + 5 Φ2^2) +
            5 ηt (62 + 6 Φ2 + θl (-56 + 12 Φ2 + 5 Φ2^2))) + 12 η^3
         (θp (1216 + 74 Φ2 + ηt (181 + 16 Φ2)) + (-1 + ηt) θl (-37 + 20 Φ2 +
              20 θp^2 (2 + Φ2)^2 + θp (1536 + 111 Φ1 + 137 Φ2 + 25 Φ2^2)))) - x^4
     (-1 + η)^4 (4 × (-1 + η) θp (200 η^5 + 12 η^2 (-380 + 5 ηt (-9 + Φ2) - 22 Φ2) +
            10 η^3 (63 + 2 ηt (-60 + Φ2) - 19 Φ2) - 20 η^4 (-60 + 10 ηt + Φ2) +
            15 ηt (-7 + 2 Φ2) + 9 η (-4 × (18 + Φ2) + ηt (-7 + 8 Φ2))) +
        (-1 + ηt) θl (40 η^3 θp (-9 + 13 Φ2 + 5 Φ2^2) + 2 ×
             (-24 + 18 θp Φ1 + 10 Φ2 - 5 θp Φ2 (2 + Φ2) + 6 θp^2 (2 + Φ2)^2) +
            3 η (60 θp^2 (2 + Φ2)^2 + 6 × (-61 + 20 Φ2) + θp (1130 + 405 Φ1 +
                  133 Φ2 - 40 Φ2^2)) + 6 η^2 (-132 + 60 Φ2 + 30 θp^2 (2 + Φ2)^2 +
              θp (3094 + 231 Φ1 + 299 Φ2 + 50 Φ2^2)))) + 3 x^5 (-1 + η)^5
     (2 × (-1 + η) θp (100 η^4 + 10 η^2 (-3 + ηt (-45 + Φ2) - 8 Φ2) -
            6 × (18 + Φ2) - 10 η^3 (-45 + 10 ηt + Φ2) + ηt (-5 + 12 Φ2) +
            4 η (5 ηt (-7 + Φ2) - 3 × (125 + 7 Φ2))) + (-1 + ηt) θl
         (10 η^2 θp (34 + 14 Φ2 + 5 Φ2^2) + 2 × (-68 + 20 Φ2 + 6 θp^2 (2 + Φ2)^2 +
              θp (152 + 54 Φ1 + 22 Φ2 - 5 Φ2^2)) + η (24 θp^2 (2 + Φ2)^2 +
              20 × (-9 + 4 Φ2) + θp (3094 + 237 Φ1 + 313 Φ2 + 50 Φ2^2)))) + x
     (-1 + η) η^2 θp (40 η^7 + 4 η^5 (66 + ηt (-95 + Φ2) - 13 Φ2) +
        4 ηt (12 - 5 Φ2) - 4 η^6 (-95 + 10 ηt + Φ2) + 2 η^4 (-1290 + 162 θl - 32 Φ2 -
            10 θl Φ2 - 5 θl Φ2^2 + 10 ηt (3 + Φ2) + ηt θl (-162 + 10 Φ2 + 5 Φ2^2)) +
        3 η^3 (416 + 28 Φ2 + 2 ηt (51 + 8 Φ2) - θl (554 + 39 Φ1 + 19 Φ2 +
              10 Φ2^2 + 24 θp (2 + Φ2)^2) + ηt θl (554 + 39 Φ1 + 19 Φ2 + 10 Φ2^2 +
              24 θp (2 + Φ2)^2)) + 3 η^2 (16 ηt (-5 + Φ2) + 12 × (18 + Φ2) -
            θl (74 + 81 Φ1 - 71 Φ2 - 10 Φ2^2 + 60 θp (2 + Φ2)^2) +
            ηt θl (74 + 81 Φ1 - 71 Φ2 - 10 Φ2^2 + 60 θp (2 + Φ2)^2)) +
        2 η (θl (72 - 18 Φ1 + 46 Φ2 + 5 Φ2^2 - 24 θp (2 + Φ2)^2) + ηt (123 -
              50 Φ2 + θl (-72 + 18 Φ1 - 46 Φ2 - 5 Φ2^2 + 24 θp (2 + Φ2)^2))))) +
w (x (-1 + η) - η) (-1 + η) × (-12 η^4 (1 + η) × (-1 + ηt) θl θp
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(2 + Φ2) × (-2 + θp (2 + Φ2)) - 4 x^6 (-1 + η)^6 θp
(148 + 30 η^3 - 148 θl + 8 Φ2 - 18 θl Φ2 - 5 θl Φ2^2 - 3 η^2 (-5 + 10 ηt + Φ2) +
  η (-193 - 5 Φ2 + 2 ηt (10 + Φ2) + θl (35 + Φ2) - ηt θl (35 + Φ2)) +
  ηt (-2 × (-5 + Φ2) + θl (148 + 18 Φ2 + 5 Φ2^2))) - x^2 (-1 + η)^2 η
(600 η^6 θp + 2 ηt θp (137 - 40 Φ2) - 60 η^5 θp (-29 + 10 ηt + Φ2) +
  4 η^3 θp (2 ηt (175 + Φ2) + 4 × (53 + 7 Φ2) - θl (800 + 78 Φ2 + 25 Φ2^2) +
     ηt θl (800 + 78 Φ2 + 25 Φ2^2)) - 4 η^4 θp
    (1445 + 49 Φ2 - 5 θl (59 + Φ2) + 5 ηt (28 - 2 Φ2 + θl (59 + Φ2))) +
  3 η^2 (2 θp (24 × (18 + Φ2) + ηt (-111 + 22 Φ2)) + (-1 + ηt) θl
       (40 θp^2 (2 + Φ2)^2 + 4 × (-6 + 5 Φ2) + θp (870 + 171 Φ1 + 83 Φ2))) +
  2 η (2 ηt θp (38 - 25 Φ2) + (-1 + ηt) θl (-29 + 20 Φ2 + 36 θp^2
          (2 + Φ2)^2 + θp (22 + 135 Φ1 - 49 Φ2 - 30 Φ2^2)))) - x^4 (-1 + η)^4
(2 × (-1 + η) θp (600 η^4 + 8 η^2 (-400 + 5 ηt (-17 + Φ2) - 26 Φ2) -
     60 η^3 (-27 + 10 ηt + Φ2) + 15 ηt (-3 + 2 Φ2) +
     24 η (ηt (5 + Φ2) - 3 × (18 + Φ2))) - (-1 + ηt) θl
    (40 η^3 θp (47 + Φ2) - 8 η^2 θp (770 + 84 Φ2 + 25 Φ2^2) - 3 η
       (20 θp^2 (2 + Φ2)^2 + 20 × (-7 + 3 Φ2) + θp (954 + 189 Φ1 + 125 Φ2)) -
     4 × (-34 + 10 Φ2 + 3 θp^2 (2 + Φ2)^2 + θp (22 + 27 Φ1 + Φ2 - 5 Φ2^2)))) +
x^3 (-1 + η)^3 (1200 η^6 θp + 20 ηt θp (7 - 2 Φ2) - 120 η^5 θp
    (-23 + 10 ηt + Φ2) - 8 η^4 θp (1325 + 43 Φ2 -
     5 θl (53 + Φ2) + 5 ηt (-2 × (-8 + Φ2) + θl (53 + Φ2))) +
  3 η^2 (2 θp (36 × (18 + Φ2) + ηt (-127 + 18 Φ2)) + (-1 + ηt) θl
       (-124 + 60 Φ2 + 40 θp^2 (2 + Φ2)^2 + θp (1394 + 273 Φ1 + 169 Φ2))) +
  η (2 ηt θp (131 - 70 Φ2) + (-1 + ηt) θl (-230 + 80 Φ2 +
          48 θp^2 (2 + Φ2)^2 + θp (178 + 297 Φ1 - 31 Φ2 - 60 Φ2^2))) +
  8 η^3 θp (344 + 31 Φ2 - θl (785 + 81 Φ2 + 25 Φ2^2) + ηt
       (275 - Φ2 + θl (785 + 81 Φ2 + 25 Φ2^2)))) + 4 x^5 (-1 + η)^5
(((-1 + η) θp (150 η^3 + 2 η (-385 + 5 ηt (-11 + Φ2) - 23 Φ2) +
     3 ηt (5 + Φ2) - 9 × (18 + Φ2) - 15 η^2 (-21 + 10 ηt + Φ2)) +
    (-1 + ηt) θl (15 × (-2 + Φ2) + 3 θp^2 (2 + Φ2)^2 + θp (-5 η^2 (41 + Φ2) +
          12 × (15 + 3 Φ1 + 2 Φ2) + η (755 + 87 Φ2 + 25 Φ2^2)))) + x (-1 + η)
  η^2 θp (120 η^6 + 98 ηt - 40 ηt Φ2 - 12 η^5 (-35 + 10 ηt + Φ2) -
    4 η^4 (313 + 11 Φ2 - θl (65 + Φ2) + ηt (40 - 2 Φ2 + θl (65 + Φ2))) +
    4 η^3 (16 + 5 Φ2 - θl (163 + 15 Φ2 + 5 Φ2^2) +
       ηt (85 + Φ2 + θl (163 + 15 Φ2 + 5 Φ2^2))) +
    3 η^2 (12 × (18 + Φ2) - θl (174 + 39 Φ1 - Φ2 + 20 θp (2 + Φ2)^2) +
       ηt (-58 + 16 Φ2 + θl (174 + 39 Φ1 - Φ2 + 20 θp (2 + Φ2)^2))) +
    η (θl (94 - 81 Φ1 + 87 Φ2 + 20 Φ2^2 - 48 θp (2 + Φ2)^2) + ηt (16 -
          20 Φ2 + θl (-94 + 81 Φ1 - 87 Φ2 - 20 Φ2^2 + 48 θp (2 + Φ2)^2))))) +
w^4 (-1 + η)^4 (-12 η^3 (1 + 3 η + η^2) × (-1 + ηt) θl θp (2 + Φ2) ×
  (-2 + θp (2 + Φ2)) + 2 x^5 (-1 + η)^5 (6 × (-1 + η) θp
     (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) + (-1 + ηt)
    θl (-68 + 20 Φ2 + 6 θp^2 (2 + Φ2)^2 + θp (368 + 54 Φ1 + 50 Φ2 + 5 Φ2^2))) -
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x^4 (-1 + η)^4 (4 × (-1 + η) θp (-148 + 120 η^3 - 45 ηt - 8 Φ2 + 12 ηt Φ2 +
        6 η ηt (-35 + 2 Φ2) - 6 η^2 (-35 + 20 ηt + 2 Φ2) - 9 η (67 + 7 Φ2)) +
      (-1 + ηt) θl (-144 + 60 Φ2 + 36 θp^2 (2 + Φ2)^2 + 60 η θp^2 (2 + Φ2)^2 +
        6 η (-61 + 20 Φ2) + 2 θp (296 + 54 Φ1 + 6 Φ2 - 5 Φ2^2) +
        η θp (2718 + 405 Φ1 + 353 Φ2 + 40 Φ2^2))) + 3 x^3 (-1 + η)^3
    (240 η^5 θp + 12 η^3 θp (-133 + 2 ηt (-10 + Φ2) - 9 Φ2) - 24 η^4 θp (-10 +
        10 ηt + Φ2) + 2 η (2 θp (148 + ηt (29 - 7 Φ2) + 8 Φ2) + (-1 + ηt) θl
          (-41 + 20 Φ2 + 24 θp^2 (2 + Φ2)^2 + θp (272 + 54 Φ1 - 6 Φ2 - 5 Φ2^2))) +
      η^2 (2 θp (262 + 50 Φ2 + ηt (151 + 12 Φ2)) + (-1 + ηt) θl (-96 + 189
            θp Φ1 + 40 Φ2 + 40 θp^2 (2 + Φ2)^2 + 5 θp (246 + 29 Φ2 + 4 Φ2^2))) +
      2 θp (-2 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (31 - 10 Φ2 +
            2 θl (2 + Φ2) × (-2 + θp (2 + Φ2))))) - x^2
    (-1 + η)^2 η (480 η^5 θp - 24 η^4 θp (-25 + 20 ηt + 2 Φ2) +
      12 η^3 θp (-261 - 19 Φ2 + ηt (-50 + 4 Φ2)) +
      6 η (θp (296 + 21 ηt + 16 Φ2 - 4 ηt Φ2) + (-1 + ηt) θl (-11 + 10 Φ2 +
            36 θp^2 (2 + Φ2)^2 + θp (224 + 54 Φ1 - 30 Φ2 - 5 Φ2^2))) +
      η^2 (12 θp (23 + 15 Φ2 + ηt (49 + 8 Φ2)) + (-1 + ηt) θl (-58 + 40 Φ2 +
            120 θp^2 (2 + Φ2)^2 + θp (2122 + 351 Φ1 + 187 Φ2 + 40 Φ2^2))) +
      6 θp (-6 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (61 - 20 Φ2 +
            6 θl (2 + Φ2) × (-2 + θp (2 + Φ2))))) + x
    (-1 + η) η^2 θp (120 η^5 + 12 η^3 (-64 + ηt (-15 + Φ2) - 5 Φ2) -
      12 η^4 (-15 + 10 ηt + Φ2) + η^2 (-124 + 40 Φ2 + 18 ηt (9 + 2 Φ2) -
        θl (366 + 81 Φ1 - 19 Φ2 + 10 Φ2^2 + 60 θp (2 + Φ2)^2) +
        ηt θl (366 + 81 Φ1 - 19 Φ2 + 10 Φ2^2 + 60 θp (2 + Φ2)^2)) +
      12 × (-3 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (12 - 5 Φ2 +
            3 θl (2 + Φ2) × (-2 + θp (2 + Φ2)))) + 2 η (8 × (37 + 2 Φ2) -
        θl (80 + 54 Φ1 - 102 Φ2 - 5 Φ2^2 + 72 θp (2 + Φ2)^2) + ηt
          (-3 + 6 Φ2 + θl (80 + 54 Φ1 - 102 Φ2 - 5 Φ2^2 + 72 θp (2 + Φ2)^2))))) +
w^3 (-1 + η)^3 (4 η^3 (1 + 9 η + 9 η^2 + η^3) × (-1 + ηt) θl θp (2 + Φ2) ×
    (-2 + θp (2 + Φ2)) + 4 x^6 (-1 + η)^6 (3 × (-1 + η) θp
        (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) + (-1 + ηt)
        θl (5 × (-2 + Φ2) + θp^2 (2 + Φ2)^2 + θp (168 + 12 Φ1 + 22 Φ2 + 5 Φ2^2))) +
    x^4 (-1 + η)^4 (4 × (-1 + η) θp (300 η^4 + 6 η^2 (-175 + 5 ηt (-27 + Φ2) -
            31 Φ2) - 3 × (18 + Φ2) - 30 η^3 (-27 + 10 ηt + Φ2) +
        ηt (-100 + 31 Φ2) + η (-1786 - 181 ηt - 98 Φ2 + 44 ηt Φ2)) +
      (-1 + ηt) θl (η (180 θp^2 (2 + Φ2)^2 + 18 × (-61 + 20 Φ2) +
            θp (7922 + 1215 Φ1 + 779 Φ2)) + 4 × (-36 + 15 Φ2 + 9 θp^2
              (2 + Φ2)^2 + θp (54 + 27 Φ1 - 5 Φ2 - 5 Φ2^2)) + 2 η^2 (-132 + 60 Φ2 +
            30 θp^2 (2 + Φ2)^2 + θp (2474 + 231 Φ1 + 403 Φ2 + 100 Φ2^2)))) -
    x^5 (-1 + η)^5 (2 × (-1 + η) θp (-888 + 300 η^3 - 75 ηt + 6 η
            (-225 + 5 ηt (-21 + Φ2) - 28 Φ2) - 48 Φ2 + 22 ηt Φ2 -
        30 η^2 (-21 + 10 ηt + Φ2)) + (-1 + ηt) θl (12 × (-34 + 10 Φ2 +
            3 θp^2 (2 + Φ2)^2 + θp (170 + 27 Φ1 + 19 Φ2)) + η (24 θp^2 (2 + Φ2)^2 +
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                20 × (-9 + 4 Φ2) + θp (2934 + 237 Φ1 + 425 Φ2 + 100 Φ2^2)))) - x^3
        (-1 + η)^3 (1200 η^6 θp + 24 η^4 θp (-285 + 5 ηt (-23 + Φ2) - 29 Φ2) -
          120 η^5 θp (-23 + 10 ηt + Φ2) +
          3 η^2 (2 θp (1688 + 94 Φ2 + 9 ηt (1 + 2 Φ2)) + (-1 + ηt) θl (120 θp^2
                (2 + Φ2)^2 + 24 × (-12 + 5 Φ2) + θp (3794 + 567 Φ1 + 299 Φ2))) +
          6 η (2 θp (54 + 83 ηt + 3 Φ2 - 26 ηt Φ2) + (-1 + ηt) θl (-41 +
                20 Φ2 + 24 θp^2 (2 + Φ2)^2 + 2 θp (42 + 27 Φ1 - 11 Φ2 - 5 Φ2^2))) +
          4 η^3 (3 θp (-658 + 18 Φ2 + ηt (227 + 12 Φ2)) + (-1 + ηt) θl (-37 +
                20 Φ2 + 20 θp^2 (2 + Φ2)^2 + θp (986 + 111 Φ1 + 185 Φ2 + 50 Φ2^2))) +
          2 θp (-2 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) + ηt (93 - 30 Φ2 +
                2 θl (2 + Φ2) × (-2 + θp (2 + Φ2))))) + x^2 (-1 + η)^2
        η (600 η^6 θp + 12 η^4 θp (-255 + 5 ηt (-29 + Φ2) - 32 Φ2) -
          60 η^5 θp (-29 + 10 ηt + Φ2) +
          η^2 (4 θp (1644 + 93 Φ2 + ηt (-39 + 49 Φ2)) + 3 × (-1 + ηt) θl
                (-58 + 40 Φ2 + 120 θp^2 (2 + Φ2)^2 + θp (2338 + 351 Φ1 + 99 Φ2))) +
          6 η (θp (ηt (115 - 42 Φ2) + 6 × (18 + Φ2)) + (-1 + ηt) θl (-11 +
                10 Φ2 + 36 θp^2 (2 + Φ2)^2 + 2 θp (18 + 27 Φ1 - 23 Φ2 - 5 Φ2^2))) +
          2 η^3 (2 θp (-1626 + 9 Φ2 + ηt (360 + 29 Φ2)) + (-1 + ηt) θl
                (30 θp^2 (2 + Φ2)^2 + 2 × (-6 + 5 Φ2) + θp (702 + 105 Φ1 + 157 Φ2 +
                50 Φ2^2))) + 6 θp (-2 θl (2 + Φ2) × (-2 + θp (2 + Φ2)) +
              ηt (61 - 20 Φ2 + 2 θl (2 + Φ2) × (-2 + θp (2 + Φ2))))) - x
        (-1 + η) η^2 θp (120 η^6 + 12 η^4 (-44 + ηt (-35 + Φ2) - 7 Φ2) -
          12 η^5 (-35 + 10 ηt + Φ2) + 12 (-θl (2 + Φ2) × (-2 + θp (2 + Φ2)) +
              ηt (12 - 5 Φ2 + θl (2 + Φ2) × (-2 + θp (2 + Φ2)))) +
          η^3 (-4 × (457 + 2 Φ2) - θl (130 + 39 Φ1 + 35 Φ2 + 20 Φ2^2 +
                24 θp (2 + Φ2)^2) + ηt (302 + 32 Φ2 +
                θl (130 + 39 Φ1 + 35 Φ2 + 20 Φ2^2 + 24 θp (2 + Φ2)^2))) +
          2 η (6 × (18 + Φ2) + 2 θl (54 - 27 Φ1 + 59 Φ2 + 5 Φ2^2 - 36 θp (2 + Φ2)^2) +
              ηt (65 - 32 Φ2 + 2 θl (-54 + 27 Φ1 - 59 Φ2 - 5 Φ2^2 +
                    36 θp (2 + Φ2)^2))) + η^2 (1600 + 92 Φ2 -
              θl (1370 + 243 Φ1 - 121 Φ2 + 180 θp (2 + Φ2)^2) + ηt (-36 +
                80 Φ2 + θl (1370 + 243 Φ1 - 121 Φ2 + 180 θp (2 + Φ2)^2))))))) -
2 cσ^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)
  (-1 +
    η) × (2
      x^7
      (-1 + η)^7
      θp
      (2 - 2 θl - 9 μ1 - 15 w μ1 - 4 w^2 μ1 + 5 θl μ1 +
        7 w θl μ1 - 5 μ1^2 - 9 w μ1^2 - 4 w^2 μ1^2 +
        θl μ1^2 + w θl μ1^2 + w^2 η^4 (1 + μ1) -
        w η^3 (3 + w (3 + ηt - 4 μ1)) × (1 + μ1) +
        η^2 (2 × (1 + μ1) + 3 w^2 (1 + ηt - 4 μ1) ×
              (1 + μ1) + 3 w (2 + ηt - 3 μ1 + ηt μ1 - 3 μ1^2)) +
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    ηt (2 × (1 + μ1) + w^2 (1 + μ1) - θl (-2 + 5 μ1 + μ1^2) + w
        (3 + (3 - 7 θl) μ1 - θl μ1^2)) -
    η (4 + 2 ηt - 7 μ1 + 2 ηt μ1 - 5 μ1^2 + w^2 (1 + 3 ηt - 12 μ1) × (1 + μ1) + w
        (3 + (-27 + 7 θl) μ1 + (-18 + θl) μ1^2 + ηt (6 + (6 - 7 θl) μ1 - θl μ1^2)))) +
4 × (-1 + w (-1 + η)) η (1 + η)^2 θp (η (ηt θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 +
          μ1 (8 + 6 μ2)) - η^3 (- ((-1 + ηt) θl μ1 (1 + μ1 + 6 μ2)) +
          θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) + η^2
        ((-1 + ηt) θl (5 + 3 μ1^2 + 6 μ2 + 4 μ1 (2 + 3 μ2)) +
          θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) + η
        (-ηt θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) +
          (-1 + ηt) θl (4 + 4 μ1^2 + 11 μ2 + 9 μ2^2 + μ1 (8 + 11 μ2)))) +
    w (-1 + η) (η^4 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) - ηt
        θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + η^3
        (- ((-1 + ηt) θl (5 + 7 μ1^2 + 6 μ2 + 12 μ1 (1 + 3 μ2))) +
          θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) - η ((-1 + ηt) θl
           (2 + 2 μ1 + 3 μ2)^2 + ηt θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) - 2
        η^2 ((-1 + ηt) θl (9 + 7 μ1^2 + 17 μ2 + 9 μ2^2 + μ1 (16 + 23 μ2)) +
          θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2) -
             ηt (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)))) +
    w^3 (-1 + η)^3 (η^2 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) - ηt
        θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + η
        (-9 × (-1 + ηt) θl (μ1^2 + (1 + μ2)^2 + μ1 (2 + 4 μ2)) +
          θp (-5 - 5 μ1^2 - 12 μ2 - 18 μ2^2 - 2 μ1 (5 + 6 μ2) +
             ηt (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)))) -
    w^2 (-1 + η)^2 (2 η^3 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) - 2
        ηt θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + η
        (- ((-1 + ηt) θl (13 + 11 μ1^2 + 30 μ2 + 18 μ2^2 + 12 μ1 (2 + 3 μ2))) +
          θp (-5 - 5 μ1^2 - 12 μ2 - 18 μ2^2 - 2 μ1 (5 + 6 μ2) +
             ηt (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)))) + η^2
        (- ((-1 + ηt) θl (14 + 15 μ1^2 + 23 μ2 + 9 μ2^2 + μ1 (29 + 65 μ2))) +
          θp (-5 - 5 μ1^2 - 12 μ2 - 18 μ2^2 - 2 μ1 (5 + 6 μ2) +
             ηt (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))))) +
x^5 (-1 + η)^5 (2 × (-1 + η) θp (13 + 7 η - 10 η^2 + 30 η^3 - 2 ηt - 20 η ηt - 30
        η^2 ηt - 20 θp - 60 η θp + 21 μ1 + 112 η μ1 + 155 η^2 μ1 + 30 η^3
        μ1 - 10 ηt μ1 - 18 η ηt μ1 - 30 η^2 ηt μ1 - 40 θp μ1 - 120 η θp
        μ1 + 2 μ1^2 + 45 η μ1^2 + 75 η^2 μ1^2 + 4 ηt μ1^2 + 2 η ηt μ1^2 - 20 θp
        μ1^2 - 60 η θp μ1^2 + w^4 (-1 + η)^4 (1 + μ1) (η - ηt + 4 μ1) + 19
        μ2 + 47 η μ2 - 2 ηt μ2 - 48 θp μ2 - 144 η θp μ2 + μ1 μ2 - 7
        η μ1 μ2 - 60 η^2 μ1 μ2 + 16 ηt μ1 μ2 + 30 η ηt μ1 μ2 - 48
        θp μ1 μ2 - 144 η θp μ1 μ2 - 72 θp μ2^2 - 216 η θp μ2^2 - w^3
        (-1 + η)^3 (10 - 20 θp + 39 μ1 - 40 θp μ1 + 23 μ1^2 - 20 θp μ1^2 +
          10 η^2 (1 + μ1) + 22 μ2 - 48 θp μ2 - 14 μ1 μ2 - 48 θp μ1 μ2 -
          72 θp μ2^2 + η (7 + 47 μ1 + 40 μ1^2 - 10 ηt (1 + μ1) - 12 μ1 μ2) +
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        ηt (-7 - 7 μ1 + 12 μ1 μ2)) - w (-1 + η) × (32 - 11 ηt - 60 θp +
        83 μ1 - 27 ηt μ1 - 120 θp μ1 + 21 μ1^2 + 8 ηt μ1^2 - 60 θp μ1^2 +
        45 η^3 (1 + μ1) + 5 η^2 (10 + 27 μ1^2 - 9 ηt (1 + μ1) + μ1 (55 - 18 μ2)) +
        62 μ2 - 4 ηt μ2 - 144 θp μ2 - 22 μ1 μ2 + 44 ηt μ1 μ2 -
        144 θp μ1 μ2 - 216 θp μ2^2 + η (41 + 291 μ1 + 130 μ1^2 +
            102 μ2 - 72 μ1 μ2 + 2 ηt (-25 + μ1^2 + 6 μ1 (-4 + 5 μ2)) -
            24 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))) + w^2
      (-1 + η)^2 (33 - 15 ηt - 60 θp + 101 μ1 - 23 ηt μ1 - 120 θp μ1 +
        38 μ1^2 + 4 ηt μ1^2 - 60 θp μ1^2 + 15 η^3 (1 + μ1) -
        5 η^2 (3 ηt (1 + μ1) - 2 × (4 + 6 μ1^2 + μ1 (10 - 3 μ2))) + 65 μ2 - 2 ηt μ2 -
        144 θp μ2 - 37 μ1 μ2 + 40 ηt μ1 μ2 - 144 θp μ1 μ2 - 216 θp μ2^2 -
        η (-40 - 225 μ1 - 125 μ1^2 + ηt (40 + μ1 (40 - 30 μ2)) - 55 μ2 +
            77 μ1 μ2 + 12 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))))) -
  (-1 + ηt) θl (20 - 34 θp - 110 η θp - 60 η^2 θp + 52 μ1 + 80 η μ1 - 16
      η^2 μ1 - 66 θp μ1 - 108 η θp μ1 + 136 η^2 θp μ1 - 28 μ1^2 - 16 η
      μ1^2 - 16 η^2 μ1^2 - 20 θp μ1^2 - 58 η θp μ1^2 + 16 η^2 θp μ1^2 + 5
      μ2 - 62 θp μ2 - 112 η θp μ2 + 10 η^2 θp μ2 - 19 μ1 μ2 - 86 θp
      μ1 μ2 - 316 η θp μ1 μ2 - 194 η^2 θp μ1 μ2 + 5 θp Φ1 + 22 θp μ1
      Φ1 + 46 η θp μ1 Φ1 + 5 η^2 θp μ1 Φ1 + 5 θp μ1^2 Φ1 + 16 η θp μ1^2
      Φ1 + 5 η^2 θp μ1^2 Φ1 + 5 θp μ2 Φ1 + 5 θp μ1 μ2 Φ1 - 5 θp Φ2 - 14 θp
      μ1 Φ2 - 24 η θp μ1 Φ2 + 5 η^2 θp μ1 Φ2 + 3 θp μ1^2 Φ2 + 6 η θp μ1^2
      Φ2 + 5 η^2 θp μ1^2 Φ2 - 5 θp μ2 Φ2 - 17 θp μ1 μ2 Φ2 - 60 η θp μ1
      μ2 Φ2 + w^3 (-1 + η)^3 (28 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2) +
        θp (40 μ1^2 + 5 × (8 - Φ1 + Φ2) + μ2 (64 - 5 Φ1 + 5 Φ2) +
            μ1 (80 - 11 Φ1 + 11 Φ2 + μ2 (208 - 5 Φ1 + 5 Φ2)))) + w^2 (-1 + η)^2
      (60 + 156 μ1 + 80 η μ1 - 84 μ1^2 - 16 η μ1^2 + 15 μ2 - 57 μ1 μ2 +
        θp (μ1 (-198 + 44 Φ1 + 3 μ2 (-174 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
            3 × (-38 + 5 Φ1 + μ2 (-62 + 5 Φ1 - 5 Φ2) - 5 Φ2) +
            μ1^2 (-96 + 5 Φ1 + 3 Φ2) + η (-70 - 94 μ2 + μ1^2 (-108 + 15 Φ1 + 5 Φ2) -
                μ1 (118 + 694 μ2 - 45 Φ1 + 25 Φ2 + 60 μ2 Φ2)))) - w (-1 + η) ×
      (-4 × (21 + 8 η + 4 η^2) μ1^2 + μ1 (156 + 160 η - 16 η^2 - 57 μ2) +
        15 × (4 + μ2) + θp (-116 - 184 μ2 + 15 Φ1 + 15 μ2 Φ1 +
            μ1 (-192 + 55 Φ1 + μ2 (-400 + 15 Φ1 - 39 Φ2) - 39 Φ2) -
            15 Φ2 - 15 μ2 Φ2 + 2 μ1^2 (-38 + 5 Φ1 + 3 Φ2) +
            η^2 (10 μ2 + μ1^2 (16 + 5 Φ1 + 5 Φ2) + μ1 (196 - 194 μ2 + 5 Φ1 + 5 Φ2)) +
            η (-2 × (90 + 103 μ2) + μ1^2 (-166 + 31 Φ1 + 11 Φ2) -
                μ1 (226 + 1010 μ2 - 91 Φ1 + 49 Φ2 + 120 μ2 Φ2))))) +
x^6 (-1 + η)^6 (-4 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 (5 + w (-1 + η) ×
      (-5 + μ1) - μ1 - η (1 + μ1)) + 4 × (-1 + η)
    (1 + w - w η)^2 θp^2 (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) +
    θp (2 - 18 η + 40 η^2 - 24 η^3 - 8 ηt - 16 η ηt + 24 η^2 ηt + 18 θl + 24
      η θl - 18 ηt θl - 24 η ηt θl + 44 μ1 + 72 η μ1 - 92 η^2 μ1 - 24
      η^3 μ1 - 8 ηt μ1 - 16 η ηt μ1 + 24 η^2 ηt μ1 + 14 θl μ1 - 58 η
      θl μ1 - 14 ηt θl μ1 + 58 η ηt θl μ1 + 18 μ1^2 + 42 η μ1^2 - 60
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$$
\begin{aligned}
&\eta^2 \mu1^2 + 8\,\theta l\,\mu1^2 - 10\,\eta\,\theta l\,\mu1^2 - 8\,\eta t\,\theta l\,\mu1^2 + 10\,\eta\,\eta t\,\theta l\\
&\mu1^2 + 4\,w^3\,(-1+\eta)^4\,(1+\mu1)\,(\eta - \eta t + 4\,\mu1) + 18\,\mu2 - 18\\
&\eta\,\mu2 + 18\,\theta l\,\mu2 - 2\,\eta\,\theta l\,\mu2 - 18\,\eta t\,\theta l\,\mu2 + 2\,\eta\,\eta t\,\theta l\,\mu2 + 6\\
&\mu1\,\mu2 - 30\,\eta\,\mu1\,\mu2 + 24\,\eta^2\,\mu1\,\mu2 + 12\,\eta t\,\mu1\,\mu2 - 12\,\eta\,\eta t\,\mu1\\
&\mu2 + 42\,\theta l\,\mu1\,\mu2 + 34\,\eta\,\theta l\,\mu1\,\mu2 - 42\,\eta t\,\theta l\,\mu1\,\mu2 - 34\,\eta\,\eta t\\
&\theta l\,\mu1\,\mu2 - 9\,\theta l\,\mu1\,\Phi1 - \eta\,\theta l\,\mu1\,\Phi1 + 9\,\eta t\,\theta l\,\mu1\,\Phi1 + \eta\,\eta t\\
&\theta l\,\mu1\,\Phi1 - 3\,\theta l\,\mu1^2\,\Phi1 - \eta\,\theta l\,\mu1^2\,\Phi1 + 3\,\eta t\,\theta l\,\mu1^2\,\Phi1 + \eta\,\eta t\\
&\theta l\,\mu1^2\,\Phi1 + 5\,\theta l\,\mu1\,\Phi2 - \eta\,\theta l\,\mu1\,\Phi2 - 5\,\eta t\,\theta l\,\mu1\,\Phi2 + \eta\,\eta t\\
&\theta l\,\mu1\,\Phi2 - \theta l\,\mu1^2\,\Phi2 - \eta\,\theta l\,\mu1^2\,\Phi2 + \eta t\,\theta l\,\mu1^2\,\Phi2 + \eta\,\eta t\,\theta l\\
&\mu1^2\,\Phi2 + 12\,\theta l\,\mu1\,\mu2\,\Phi2 - 12\,\eta t\,\theta l\,\mu1\,\mu2\,\Phi2 - w^2\,(-1+\eta)^2\\
&\Big(-10 - 10\,\theta l - 84\,\mu1 - 14\,\theta l\,\mu1 - 50\,\mu1^2 - 16\,\theta l\,\mu1^2 +\\
&\quad 12\,\eta^3\,(1+\mu1) - 22\,\mu2 - 14\,\theta l\,\mu2 + 14\,\mu1\,\mu2 - 110\,\theta l\,\mu1\,\mu2 +\\
&\quad 4\,\eta^2\,\big(1 + 13\,\mu1 + 12\,\mu1^2 - 3\,\eta t\,(1+\mu1) - 3\,\mu1\,\mu2\big) +\\
&\quad 2\,\eta\,\big(-3 + 10\,\mu1 + \mu1^2 + 11\,\mu2 - \mu1\,\mu2 + \eta t\,(-2 - 2\,\mu1 + 6\,\mu1\,\mu2)\big) +\\
&\quad 9\,\theta l\,\mu1\,\Phi1 + 3\,\theta l\,\mu1^2\,\Phi1 - 5\,\theta l\,\mu1\,\Phi2 + \theta l\,\mu1^2\,\Phi2 - 12\,\theta l\,\mu1\,\mu2\,\Phi2 +\\
&\quad \eta t\,\big(16 + 4\,\mu1\,(4 - 3\,\mu2) + 2\,\theta l\,(5 + 7\,\mu2) - \theta l\,\mu1^2\,(-16 + 3\,\Phi1 + \Phi2) +\\
&\qquad \theta l\,\mu1\,(14 - 9\,\Phi1 + 5\,\Phi2 + 2\,\mu2\,(55 + 6\,\Phi2))\big)\Big) + w\,(-1+\eta)\times\\
&\Big(36\,\eta^3\,(1+\mu1) - 4\,\eta^2\,\big(4 - 27\,\mu1^2 + 9\,\eta t\,(1+\mu1) + \mu1\,(-41 + 9\,\mu2)\big) +\\
&\quad \eta\,\big(-8 + 40\,\mu2 + 2\,\theta l\,\mu2 + \mu1^2\,(-56 + \theta l\,(10 + \Phi1 + \Phi2)) +\\
&\qquad \mu1\,(-88 + 28\,\mu2 + \theta l\,(82 - 34\,\mu2 + \Phi1 + \Phi2)) -\\
&\qquad \eta t\,\big(-8\,\mu1\,(2 + 3\,\mu2) + 2\times(-8 + \theta l\,\mu2) +\\
&\qquad\quad \theta l\,\mu1^2\,(10 + \Phi1 + \Phi2) + \theta l\,\mu1\,(82 - 34\,\mu2 + \Phi1 + \Phi2)\big)\big) -\\
&\quad 2\times\big(6 + 56\,\mu1 + 26\,\mu1^2 + 20\,\mu2 - 4\,\mu1\,\mu2 + \theta l\,\big(2\times(7 + 8\,\mu2) -\\
&\qquad\quad \mu1^2\,(-12 + 3\,\Phi1 + \Phi2) + \mu1\,(14 + 76\,\mu2 - 9\,\Phi1 + 5\,\Phi2 + 12\,\mu2\,\Phi2)\big) +\\
&\qquad \eta t\,\big(-10 + 2\,\mu1\,(-5 + 6\,\mu2) - 2\,\theta l\,(7 + 8\,\mu2) + \theta l\,\mu1^2\,(-12 + 3\,\Phi1 +\\
&\qquad\quad \Phi2) - \theta l\,\mu1\,(14 - 9\,\Phi1 + 5\,\Phi2 + 4\,\mu2\,(19 + 3\,\Phi2))\big)\big)\big)\big)\big) +\\
&x\,(-1+\eta)\,\theta p\,\Big(w^4\,(-1+\eta)^4\,\big(2\,\eta^6\,(1+\mu1) - 2\,\eta^5\,\big(-1 + \eta t - 5\,\mu1 + \eta t\,\mu1 -\\
&\quad 4\,\mu1^2 + 6\,\mu1\,\mu2\big) - 2\,\eta^4\,\big(-4 - 7\,\mu1 - 3\,\mu1^2 - 11\,\mu2 + 7\,\mu1\,\mu2 + \eta t\\
&\quad (1 + \mu1 - 6\,\mu1\,\mu2) + 8\,\theta p\,\big(5 + 5\,\mu1^2 + 12\,\mu2 + 18\,\mu2^2 + 2\,\mu1\,(5 + 6\,\mu2)\big)\big) +\\
&\quad \eta t\,\big(-5\times(1+\mu1)\,\mu2 + 4\,\theta p\,\big(4 + 4\,\mu1^2 + 6\,\mu2 + 9\,\mu2^2 + \mu1\,(8 + 6\,\mu2)\big)\big) +\\
&\quad \eta^2\,\big(-2\times\big(5 + 8\,\mu1 + 3\,\mu1^2 + 11\,\mu2 + 5\,\mu1\,\mu2 -\\
&\qquad 8\,\theta p\,\big(5 + 5\,\mu1^2 + 12\,\mu2 + 18\,\mu2^2 + 2\,\mu1\,(5 + 6\,\mu2)\big) + 4\,\theta l\,\big(23 + 23\,\mu1^2 +\\
&\qquad\quad 48\,\mu2 + 18\,\mu2^2 + 2\,\mu1\,(23 + 51\,\mu2)\big)\big) + \eta t\,\big(2 + 2\,\mu1 - 24\,\mu1^2 +\\
&\qquad 5\,\mu2 - 7\,\mu1\,\mu2 - 4\,\theta p\,\big(4 + 8\,\mu1 + 4\,\mu1^2 + 6\,\mu2 + 6\,\mu1\,\mu2 + 9\,\mu2^2\big) +\\
&\qquad 8\,\theta l\,\big(23 + 23\,\mu1^2 + 48\,\mu2 + 18\,\mu2^2 + 2\,\mu1\,(23 + 51\,\mu2)\big)\big)\big) + \eta\\
&\quad \big(8\,\theta p\,\big(5 + 5\,\mu1^2 + 12\,\mu2 + 18\,\mu2^2 + 2\,\mu1\,(5 + 6\,\mu2)\big) - 4\,\theta l\\
&\qquad \big(14 + 14\,\mu1^2 + 30\,\mu2 + 9\,\mu2^2 + \mu1\,(28 + 66\,\mu2)\big) + \eta t\,\big(10 + 20\,\mu1 - 2\,\mu1^2 -\\
&\qquad 5\,\mu2 - 5\,\mu1\,\mu2 + 12\,\theta p\,\big(4 + 8\,\mu1 + 4\,\mu1^2 + 6\,\mu2 + 6\,\mu1\,\mu2 + 9\,\mu2^2\big) +\\
&\qquad 4\,\theta l\,\big(14 + 14\,\mu1^2 + 30\,\mu2 + 9\,\mu2^2 + \mu1\,(28 + 66\,\mu2)\big)\big)\big) + \eta^3\\
&\quad \big(-2\times\big(1 + 5\,\mu1 + 4\,\mu1^2 - 18\,\mu1\,\mu2 + 4\,\theta p\,\big(5 + 5\,\mu1^2 + 12\,\mu2 +\\
&\qquad\quad 18\,\mu2^2 + 2\,\mu1\,(5 + 6\,\mu2)\big) + 2\,\theta l\,\big(32 + 32\,\mu1^2 + 66\,\mu2 +\\
&\qquad\quad 27\,\mu2^2 + 2\,\mu1\,(32 + 69\,\mu2)\big)\big) + \eta t\,\big(-8 - 18\,\mu1 + 26\,\mu1^2 + 5\,\mu2 +\\
&\qquad 5\,\mu1\,\mu2 - 12\,\theta p\,\big(4 + 8\,\mu1 + 4\,\mu1^2 + 6\,\mu2 + 6\,\mu1\,\mu2 + 9\,\mu2^2\big) +\\
&\qquad 4\,\theta l\,\big(32 + 32\,\mu1^2 + 66\,\mu2 + 27\,\mu2^2 + 2\,\mu1\,(32 + 69\,\mu2)\big)\big)\big) +
\end{aligned}
$$

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η (4 η^7 (1 + μ1) - 2 η^6 (2 ηt (1 + μ1) + μ1 (-11 - 5 μ1 + 12 μ2)) + ηt
    (-2 μ1^2 + μ1 (8 - 19 μ2) + 5 × (2 + μ2) +
      8 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) - η^5 (-2 - 22 μ1 - 8 μ1^2 -
      22 μ2 + 14 μ1 μ2 + 24 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
      θl (2 × (-2 + μ2) + μ1^2 (-20 + Φ1 + Φ2) + μ1 (-12 - 154 μ2 + Φ1 + Φ2)) +
      ηt (-4 × (-1 + μ1^2 + 3 μ1 μ2) + θl (2 × (-2 + μ2) +
            μ1^2 (-20 + Φ1 + Φ2) + μ1 (-12 - 154 μ2 + Φ1 + Φ2)))) + η
    (-θl (μ1^2 (30 + Φ1 - Φ2) + μ1 (72 - 4 Φ1 + μ2 (90 - 5 Φ1 - 7 Φ2) + 4 Φ2) +
          (1 + μ2) × (42 + 72 μ2 - 5 Φ1 + 5 Φ2)) + ηt (20 + 24 μ1 + 4 μ1^2 +
          5 μ2 - 19 μ1 μ2 + 16 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2) +
          θl (μ1^2 (30 + Φ1 - Φ2) + μ1 (72 - 4 Φ1 + μ2 (90 - 5 Φ1 - 7 Φ2) + 4 Φ2) +
              (1 + μ2) × (42 + 72 μ2 - 5 Φ1 + 5 Φ2))) - η^3
    (6 + 26 μ1 + 8 μ1^2 + 30 μ2 - 30 μ1 μ2 - 24 θp (5 + 5 μ1^2 + 12 μ2 +
          18 μ2^2 + 2 μ1 (5 + 6 μ2)) + ηt (16 + 32 μ1 - 8 μ1^2 + 5 μ2 -
          7 μ1 μ2 + 16 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) +
          θl (-258 - 144 μ2^2 + 5 Φ1 + μ1 μ2 (-732 + 5 Φ1 - 17 Φ2) +
              μ2 (-432 + 5 Φ1 - 5 Φ2) + 3 μ1 (-156 + 7 Φ1 - 5 Φ2) - 5 Φ2 +
              2 μ1^2 (-99 + 2 Φ1 + Φ2))) + θl (258 + 144 μ2^2 - 5 Φ1 +
          5 Φ2 - 2 μ1^2 (-99 + 2 Φ1 + Φ2) + μ2 (432 - 5 Φ1 + 5 Φ2) +
          μ1 (468 - 21 Φ1 + 15 Φ2 + μ2 (732 - 5 Φ1 + 17 Φ2)))) - 2
    η^4 (-10 + 40 θp + 3 μ1 + 80 θp μ1 + 7 μ1^2 + 40 θp μ1^2 - 8 μ2 +
      96 θp μ2 - 20 μ1 μ2 + 96 θp μ1 μ2 + 144 θp μ2^2 + θl (59 + 68 μ2 -
          μ1^2 (-53 + 2 Φ1 + Φ2) + μ1 (106 + 266 μ2 - 5 Φ1 + 2 Φ2 + 6 μ2 Φ2)) +
      ηt (-2 × (1 + μ1^2 - μ2 + μ1 (-4 + 5 μ2)) + θl (-59 - 68 μ2 + μ1^2 (-53 +
                2 Φ1 + Φ2) - μ1 (106 + 266 μ2 - 5 Φ1 + 2 Φ2 + 6 μ2 Φ2))) - η^2
    (-2 × (2 × (-5 + μ1^2 - 2 μ2 - 4 μ1 (1 + 2 μ2) + 4 θp (5 + 5 μ1^2 +
                12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) + θl (-93 - 108 μ2^2 +
            5 Φ1 + μ2 (-204 + 5 Φ1 - 5 Φ2) + μ1^2 (-71 + Φ2) - 5 Φ2 +
            μ1 (-170 + 8 Φ1 - 7 Φ2 + μ2 (-222 + 5 Φ1 + Φ2))) +
      ηt (10 - 20 μ1 + 18 μ1^2 + μ2 + μ1 μ2 + 8 θp (4 + 4 μ1^2 + 6 μ2 +
            9 μ2^2 + μ1 (8 + 6 μ2)) + 2 θl (-93 - 108 μ2^2 + 5 Φ1 +
            μ2 (-204 + 5 Φ1 - 5 Φ2) + μ1^2 (-71 + Φ2) - 5 Φ2 +
            μ1 (-170 + 8 Φ1 - 7 Φ2 + μ2 (-222 + 5 Φ1 + Φ2))))) +
w^2 (-1 + η)^2 (2 η^8 (1 + μ1) - 2 η^7 (-7 + ηt - 11 μ1 + ηt μ1 - 4 μ1^2 +
      6 μ1 μ2) - 2 η^6 (-12 - 45 μ1 - 21 μ1^2 + ηt (7 + μ1 (7 - 6 μ2)) - 11 μ2 +
      43 μ1 μ2 + 12 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) + 3 ηt
    (-5 × (1 + μ1) μ2 + 4 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) + 4
    η (2 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
      θl (22 + 18 μ1^2 + 66 μ2 + 27 μ2^2 + μ1 (40 + 78 μ2)) +
      ηt (θl (22 + 18 μ1^2 + 66 μ2 + 27 μ2^2 + μ1 (40 + 78 μ2)) + 3 × (5 + 7 μ1 -
            μ1^2 - 6 μ1 μ2 + 5 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)))) -
    η^3 (60 + 130 μ1 + 34 μ1^2 + 116 μ2 - 76 μ1 μ2 - 88 θp (5 + 5 μ1^2 +
          12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) + ηt (4 × (11 + 15 μ1 + μ1^2 - μ2 -
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                μ1 μ2 + 15 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) +
            θl (-1250 - 972 μ2^2 + 30 Φ1 + μ1^2 (Φ1 + 3 × (-372 + Φ2)) +
                μ1 (-2378 + 61 Φ1 + 6 μ2 (-751 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
                30 μ2 (-79 + Φ1 - Φ2) - 30 Φ2)) + θl (1250 + 972 μ2^2 -
            30 Φ1 - μ1^2 (Φ1 + 3 × (-372 + Φ2)) - 30 μ2 (-79 + Φ1 - Φ2) +
            30 Φ2 + μ1 (2378 - 61 Φ1 - 6 μ2 (-751 + 5 Φ1 - 3 Φ2) + 57 Φ2))) -
        η^4 (-20 + 200 θp + 34 μ1 + 400 θp μ1 + 42 μ1^2 + 200 θp μ1^2 -
            36 μ2 + 480 θp μ2 - 108 μ1 μ2 + 480 θp μ1 μ2 +
            720 θp μ2^2 + ηt (50 + 118 μ1 - 52 μ1^2 + 23 μ2 - 97 μ1 μ2 +
                48 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2) +
                θl (μ1 (-1558 + 44 Φ1 + 3 μ2 (-1150 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
                    μ1^2 (-784 + 5 Φ1 + 3 Φ2) - 3 × (262 + 144 μ2^2 - 5 Φ1 -
                        5 μ2 (-86 + Φ1 - Φ2) + 5 Φ2))) + θl (μ1^2 (784 - 5 Φ1 - 3 Φ2) +
                3 × (262 + 144 μ2^2 - 5 Φ1 - 5 μ2 (-86 + Φ1 - Φ2) + 5 Φ2) +
                μ1 (1558 - 44 Φ1 + 36 Φ2 + μ2 (3450 - 15 Φ1 + 27 Φ2)))) - η^5
          (-46 - 108 μ1 - 26 μ1^2 - 108 μ2 + 72 μ1 μ2 + 2 θl (55 + 67 μ2) +
            96 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            θl μ1^2 (-156 + 3 Φ1 + Φ2) + θl μ1 (254 - 9 Φ1 + 5 Φ2 + 2 μ2 (415 + 6 Φ2)) +
            ηt (14 + 30 μ1 - 8 μ1^2 + 4 μ2 - 68 μ1 μ2 +
                θl (-2 × (55 + 67 μ2) + μ1^2 (-156 + 3 Φ1 + Φ2) -
                    μ1 (254 + 830 μ2 - 9 Φ1 + 5 Φ2 + 12 μ2 Φ2)))) +
        η^2 (64 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            2 × (23 + 25 μ2 + μ1 (29 + 7 μ2)) - θl (662 + 648 μ2^2 - 15 Φ1 +
                μ1^2 (560 + Φ1 - Φ2) + 15 Φ2 + μ2 (1478 - 15 Φ1 + 15 Φ2) +
                μ1 (1234 - 26 Φ1 + 26 Φ2 + μ2 (2198 - 15 Φ1 + 3 Φ2))) +
            ηt (64 + 140 μ1 - 44 μ1^2 + 38 μ2 - 94 μ1 μ2 + 36 θp
                (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + θl (662 + 648 μ2^2 -
                    15 Φ1 + μ1^2 (560 + Φ1 - Φ2) + 15 Φ2 + μ2 (1478 - 15 Φ1 + 15 Φ2) +
                    μ1 (1234 - 26 Φ1 + 26 Φ2 + μ2 (2198 - 15 Φ1 + 3 Φ2))))))) -
    w^3 (-1 + η)^3 (4 η^7 (1 + μ1) + 2 η^6 (5 + 8 μ1^2 - 2 ηt (1 + μ1) + μ1 (13 - 12 μ2)) -
        2 η^5 (-11 - 32 μ1 - 15 μ1^2 + ηt (5 + μ1 (5 - 12 μ2)) - 22 μ2 + 32 μ1 μ2 +
            20 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) + 3 ηt
          (-5 × (1 + μ1) μ2 + 4 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) + 2
          η (8 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            2 θl (32 + 28 μ1^2 + 78 μ2 + 27 μ2^2 + 6 μ1 (10 + 21 μ2)) +
            ηt (20 + 34 μ1 - 4 μ1^2 - 5 μ2 - 17 μ1 μ2 +
                22 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2) +
                2 θl (32 + 28 μ1^2 + 78 μ2 + 27 μ2^2 + 6 μ1 (10 + 21 μ2)))) +
        η^4 (30 + 36 μ1 - 6 μ1^2 + 68 μ2 - 4 μ1 μ2 - 56 θp (5 + 5 μ1^2 +
                12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            θl (264 + 280 μ1^2 + 144 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (432 - 5 Φ1 + 5 Φ2) +
                μ1 (544 - 11 Φ1 + 11 Φ2 + μ2 (1248 - 5 Φ1 + 5 Φ2))) +
            ηt (-22 - 50 μ1 + 20 μ1^2 - 9 μ2 + 63 μ1 μ2 - 16 θp
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            (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) +
          θl (264 + 280 μ1^2 + 144 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (432 - 5 Φ1 + 5 Φ2) +
             μ1 (544 - 11 Φ1 + 11 Φ2 + μ2 (1248 - 5 Φ1 + 5 Φ2)))))) + 2 η^3
      (-13 + 60 θp - 34 μ1 + 120 θp μ1 - 15 μ1^2 + 60 θp μ1^2 - 26 μ2 +
        144 θp μ2 + 52 μ1 μ2 + 144 θp μ1 μ2 + 216 θp μ2^2 -
        θl (356 μ1^2 + 270 μ2^2 + 5 × (72 - Φ1 + Φ2) + μ2 (688 - 5 Φ1 + 5 Φ2) +
           μ1 (716 - 11 Φ1 + 11 Φ2 + μ2 (1528 - 5 Φ1 + 5 Φ2))) +
        ηt (-15 - 33 μ1 + 24 μ1^2 + 5 μ2 + 5 μ1 μ2 - 22 θp
            (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) +
          θl (356 μ1^2 + 270 μ2^2 + 5 × (72 - Φ1 + Φ2) + μ2 (688 - 5 Φ1 + 5 Φ2) +
             μ1 (716 - 11 Φ1 + 11 Φ2 + μ2 (1528 - 5 Φ1 + 5 Φ2)))))) + η^2
      (2 × (-20 - 31 μ1 - 5 μ1^2 - 30 μ2 - 6 μ1 μ2 + 28 θp (5 + 5 μ1^2 +
              12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
        θl (584 + 544 μ1^2 + 504 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (1256 - 5 Φ1 + 5 Φ2) +
           μ1 (1128 - 11 Φ1 + 11 Φ2 + μ2 (2312 - 5 Φ1 + 5 Φ2))) +
        ηt (26 + 62 μ1 - 60 μ1^2 + 24 μ2 - 48 μ1 μ2 + 4 θp
            (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) +
          θl (584 + 544 μ1^2 + 504 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (1256 - 5 Φ1 + 5 Φ2) +
             μ1 (1128 - 11 Φ1 + 11 Φ2 + μ2 (2312 - 5 Φ1 + 5 Φ2)))))) -
  w (-1 + η) × (6 η^8 (1 + μ1) + 2 η^7 (7 + 9 μ1^2 - 3 ηt (1 + μ1) + μ1 (22 - 18 μ2)) +
      ηt (-5 × (1 + μ1) μ2 + 4 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) + 2 η
        (-2 θl (4 + 4 μ1^2 + 18 μ2 + 9 μ2^2 + 2 μ1 (4 + 9 μ2)) + ηt (20 + 22 μ1 - 4 μ1^2 +
             5 μ2 - 31 μ1 μ2 + 18 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2) +
             2 θl (4 + 4 μ1^2 + 18 μ2 + 9 μ2^2 + 2 μ1 (4 + 9 μ2)))) - η^6
        (-14 - 84 μ1 + 8 θl μ1 - 34 μ1^2 + 20 θl μ1^2 - 44 μ2 - 2 θl μ2 + 76 μ1 μ2 +
          154 θl μ1 μ2 + 48 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
          θl μ1 Φ1 - θl μ1^2 Φ1 - θl μ1 Φ2 - θl μ1^2 Φ2 +
          ηt (2 × (7 + θl μ2) + μ1^2 (-4 + θl (-20 + Φ1 + Φ2)) +
             μ1 (10 - 24 μ2 + θl (-8 - 154 μ2 + Φ1 + Φ2)))) + η^2
        (4 × ((1 + μ1) × (-5 + μ1 - 3 μ2) + 6 θp (5 + 5 μ1^2 + 12 μ2 +
                18 μ2^2 + 2 μ1 (5 + 6 μ2))) - θl (2 μ1^2 (115 + Φ1 - Φ2) +
             15 × (20 + 24 μ2^2 - Φ1 + Φ2 + μ2 (48 - Φ1 + Φ2)) +
             μ1 (542 - 19 Φ1 + 19 Φ2 - 3 μ2 (-264 + 5 Φ1 + 3 Φ2))) +
          ηt (60 + 104 μ1 - 4 μ1^2 + 24 μ2 - 72 μ1 μ2 + 44 θp (4 + 4 μ1^2 +
                6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + 2 θl μ1^2 (115 + Φ1 - Φ2) +
             15 θl (20 + 24 μ2^2 - Φ1 + Φ2 + μ2 (48 - Φ1 + Φ2)) +
             θl μ1 (542 - 19 Φ1 + 19 Φ2 - 3 μ2 (-264 + 5 Φ1 + 3 Φ2))) - η^4
        (74 μ1 + 38 μ1^2 + 40 μ2 - 128 μ1 μ2 - 24 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 +
             2 μ1 (5 + 6 μ2)) + ηt (46 + 102 μ1 - 40 μ1^2 + 19 μ2 - 53 μ1 μ2 +
             48 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)) + θl (-788 - 432 μ2^2 +
                15 Φ1 + μ1 (-1490 + 54 Φ1 + 3 μ2 (-978 + 5 Φ1 - 13 Φ2) - 40 Φ2) +
                15 μ2 (-86 + Φ1 - Φ2) - 15 Φ2 + μ1^2 (-702 + 9 Φ1 + 5 Φ2))) +
          θl (788 + 432 μ2^2 - 15 Φ1 + μ1^2 (702 - 9 Φ1 - 5 Φ2) - 15 μ2
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(-86 + Φ1 - Φ2) + 15 Φ2 + μ1 (1490 - 54 Φ1 + 40 Φ2 +
    μ2 (2934 - 15 Φ1 + 39 Φ2))) - η^5 (-38 - 40 μ1 + 10 μ1^2 - 80 μ2 -
  20 μ1 μ2 + 72 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) +
  θl (6 × (38 + 45 μ2) + μ1^2 (262 - 7 Φ1 - 3 Φ2) +
     μ1 (466 - 19 Φ1 + 9 Φ2 + 6 μ2 (227 + 4 Φ2))) + ηt (2 + 38 μ1 - 12 μ1^2 +
     8 μ2 - 64 μ1 μ2 + θl (-6 × (38 + 45 μ2) + μ1^2 (-262 + 7 Φ1 + 3 Φ2) -
        μ1 (466 - 19 Φ1 + 9 Φ2 + 6 μ2 (227 + 4 Φ2)))) - η^3
 (52 + 84 μ1 + 8 μ1^2 + 72 μ2 + 24 μ1 μ2 - 72 θp (5 + 5 μ1^2 + 12 μ2 +
     18 μ2^2 + 2 μ1 (5 + 6 μ2)) + θl (844 + 756 μ2^2 - 30 Φ1 +
     30 Φ2 - μ1^2 (-674 + Φ1 + 5 Φ2) + μ2 (1666 - 30 Φ1 + 30 Φ2) +
     μ1 (1542 - 55 Φ1 + 49 Φ2 + μ2 (2446 - 30 Φ1 + 6 Φ2))) +
  ηt (2 × (16 + 22 μ1^2 + μ1 (-4 + μ2) + μ2 + 18 θp
        (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) +
     θl (μ1 (-1542 + 55 Φ1 + μ2 (-2446 + 30 Φ1 - 6 Φ2) - 49 Φ2) +
        μ1^2 (-674 + Φ1 + 5 Φ2) - 2 × (422 + 378 μ2^2 - 15 Φ1 +
           15 Φ2 + μ2 (833 - 15 Φ1 + 15 Φ2))))))) -
x^4 (-1 + η)^4 ((-1 + η) θp (20 + 104 η + 36 η^2 + 80 η^4 - 20 ηt - 16 η ηt -
    80 η^2 ηt - 80 η^3 ηt - 20 θp - 200 η θp - 300 η^2 θp - 16 ηt
     θp + 16 μ1 + 168 η μ1 + 456 η^2 μ1 + 440 η^3 μ1 + 80 η^4 μ1 - 48
     ηt μ1 - 80 η ηt μ1 - 64 η^2 ηt μ1 - 80 η^3 ηt μ1 - 40 θp
     μ1 - 400 η θp μ1 - 600 η^2 θp μ1 - 32 ηt θp μ1 - 4 μ1^2 + 16 η
     μ1^2 + 180 η^2 μ1^2 + 200 η^3 μ1^2 + 44 ηt μ1^2 + 32 η ηt μ1^2 + 16
     η^2 ηt μ1^2 - 20 θp μ1^2 - 200 η θp μ1^2 - 300 η^2 θp μ1^2 - 16
     ηt θp μ1^2 + 12 μ2 + 152 η μ2 + 196 η^2 μ2 - 9 ηt μ2 - 16 η
     ηt μ2 - 48 θp μ2 - 480 η θp μ2 - 720 η^2 θp μ2 - 24 ηt θp
     μ2 + 12 μ1 μ2 + 8 η μ1 μ2 - 116 η^2 μ1 μ2 - 240 η^3 μ1 μ2 + 39
     ηt μ1 μ2 + 128 η ηt μ1 μ2 + 120 η^2 ηt μ1 μ2 - 48 θp μ1
     μ2 - 480 η θp μ1 μ2 - 720 η^2 θp μ1 μ2 - 24 ηt θp μ1 μ2 - 72
     θp μ2^2 - 720 η θp μ2^2 - 1080 η^2 θp μ2^2 - 36 ηt θp μ2^2 + 2 w^4
     (-1 + η)^4 (5 - 10 θp + 12 μ1 - 20 θp μ1 + 7 μ1^2 - 10 θp μ1^2 +
       4 η^2 (1 + μ1) + 11 μ2 - 24 θp μ2 - 7 μ1 μ2 - 24 θp μ1 μ2 -
       36 θp μ2^2 + 2 η (1 + 9 μ1 + 8 μ1^2 - 2 ηt (1 + μ1) - 3 μ1 μ2) +
       ηt (-2 - 2 μ1 + 6 μ1 μ2)) - w^3 (-1 + η)^3
     (40 η^3 (1 + μ1) + 8 η^2 (7 + 20 μ1^2 - 5 ηt (1 + μ1) - 3 μ1 (-9 + 4 μ2)) +
       4 × (15 + 10 μ1^2 + μ1 (31 - 14 μ2) + 28 μ2 -
          6 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
       4 η (-24 - 82 μ1 - 46 μ1^2 + ηt (14 + μ1 (14 - 24 μ2)) - 44 μ2 +
          43 μ1 μ2 + 10 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
       ηt (-44 μ1^2 + μ1 (64 - 87 μ2) + 9 × (4 + μ2) + 4 θp
            (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)))) + w^2 (-1 + η)^2
     (40 η^4 (1 + μ1) - 40 η^3 (-4 + ηt - 8 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
       2 × (51 + 17 μ1^2 + μ1 (92 - 19 μ2) + 83 μ2 -
          20 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
       4 η^2 (-55 - 240 μ1 - 125 μ1^2 + ηt (40 + μ1 (40 - 30 μ2)) - 55 μ2 +
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                119 μ1 μ2 + 15 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            4 η (-71 - 207 μ1 - 76 μ1^2 - 130 μ2 + 98 μ1 μ2 +
                ηt (30 - 8 μ1^2 + μ1 (46 - 80 μ2) + 4 μ2) +
                30 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            ηt (80 - 132 μ1^2 + μ1 (164 - 177 μ2) + 27 μ2 + 12 θp
                (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2)))) - w (-1 + η) ×
        (120 η^4 (1 + μ1) + 40 η^3 (5 + 9 μ1^2 - 3 ηt (1 + μ1) + μ1 (20 - 9 μ2)) +
            4 × (18 + μ1^2 + 22 μ2 + μ1 (25 + 4 μ2) -
                6 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            8 η^2 (-26 - 151 μ1 - 65 μ1^2 + ηt (25 - 2 μ1^2 + μ1 (23 - 30 μ2)) - 52 μ2 +
                62 μ1 μ2 + 15 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            8 η (-33 - 84 μ1 - 21 μ1^2 - 62 μ2 + 28 μ1 μ2 + ηt
                (11 - 8 μ1^2 + μ1 (27 - 44 μ2) + 4 μ2) +
                15 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) -
            ηt (68 - 132 μ1^2 + μ1 (152 - 141 μ2) + 27 μ2 + 12 θp
                (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))))) +
    (-1 + ηt) θl (-30 - 60 η + 30 θp + 192 η θp + 280 η^2 θp + 80 η^3 θp -
        32 μ1 - 160 η μ1 - 120 η^2 μ1 + 24 η^3 μ1 + 50 θp μ1 + 366 η θp
        μ1 + 332 η^2 θp μ1 - 160 η^3 θp μ1 + 10 μ1^2 + 56 η μ1^2 + 24
        η^2 μ1^2 + 24 η^3 μ1^2 + 8 θp μ1^2 + 126 η θp μ1^2 + 172 η^2 θp
        μ1^2 - 10 μ2 - 15 η μ2 + 70 θp μ2 + 342 η θp μ2 + 292 η^2 θp
        μ2 - 20 η^3 θp μ2 + 38 μ1 μ2 + 57 η μ1 μ2 + 46 θp μ1 μ2 + 498
        η θp μ1 μ2 + 940 η^2 θp μ1 μ2 + 460 η^3 θp μ1 μ2 + 36 η θp
        μ2^2 + w^4 (-1 + η)^4 (26 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2) +
            4 θp (5 + 5 μ1^2 + 12 μ2 + 10 μ1 (1 + 3 μ2)) - 10 θp
        Φ1 - 20 η θp Φ1 - 17 θp μ1 Φ1 - 87 η θp μ1 Φ1 - 94 η^2 θp μ1
        Φ1 - 10 η^3 θp μ1 Φ1 - θp μ1^2 Φ1 - 19 η θp μ1^2 Φ1 - 34 η^2
        θp μ1^2 Φ1 - 10 η^3 θp μ1^2 Φ1 - 10 θp μ2 Φ1 - 20 η θp μ2
        Φ1 - 10 θp μ1 μ2 Φ1 - 20 η θp μ1 μ2 Φ1 + 10 θp Φ2 + 20 η
        θp Φ2 + 13 θp μ1 Φ2 + 57 η θp μ1 Φ2 + 46 η^2 θp μ1 Φ2 - 10
        η^3 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 11 η θp μ1^2 Φ2 - 14 η^2 θp μ1^2
        Φ2 - 10 η^3 θp μ1^2 Φ2 + 10 θp μ2 Φ2 + 20 η θp μ2 Φ2 - 2
        θp μ1 μ2 Φ2 + 68 η θp μ1 μ2 Φ2 + 120 η^2 θp μ1 μ2 Φ2 - w^3
        (-1 + η)^3 (-60 - 128 μ1 + 76 μ1^2 + 5 μ2 + 53 μ1 μ2 +
            2 θp (60 + 56 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (124 - 5 Φ1 + 5 Φ2) +
                μ1 (116 - 11 Φ1 + 11 Φ2 + μ2 (316 - 5 Φ1 + 5 Φ2))) +
            η (3 × (20 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) + 4 θp
                (54 + 55 μ1^2 + 9 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (87 - 5 Φ1 + 5 Φ2) +
                    μ1 (109 - 11 Φ1 + 11 Φ2 + μ2 (273 - 5 Φ1 + 5 Φ2))))) -
        w^2 (-1 + η)^2 (3 × (-28 μ1^2 + μ1 (76 - 43 μ2) + 5 × (8 + μ2)) +
            θp (-218 + 30 Φ1 + μ1^2 (Φ1 + 3 × (-52 + Φ2)) +
                μ1 (-386 + 61 Φ1 + 6 μ2 (-139 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
                6 μ2 (-71 + 5 Φ1 - 5 Φ2) - 30 Φ2) +
            η (-9 × (20 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
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                4 θp (μ1 (-283 + 44 Φ1 + 3 μ2 (-235 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
                    μ1^2 (-139 + 5 Φ1 + 3 Φ2) -
                    3 × (52 + 9 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (85 - 5 Φ1 + 5 Φ2))) +
            2 η^2 (-12 × (-5 + μ1) μ1 + 5 θp (-20 - 26 μ2 + μ1^2 (-30 + 3 Φ1 + Φ2) -
                    μ1 (38 - 9 Φ1 + 5 Φ2 + 2 μ2 (91 + 6 Φ2)))) + w
        (-1 + η) × (100 + 152 μ1 - 44 μ1^2 + 25 μ2 - 119 μ1 μ2 + 2 θp
            (-74 + 15 Φ1 + μ1 (-122 + 28 Φ1 + μ2 (-184 + 15 Φ1 - 3 Φ2) - 24 Φ2) +
              μ2 (-148 + 15 Φ1 - 15 Φ2) - 15 Φ2 + μ1^2 (-36 + Φ1 + 3 Φ2)) +
            2 η^3 (10 θp μ2 + μ1^2 (-12 + 5 θp (Φ1 + Φ2)) +
              μ1 (-12 + 5 θp (24 - 46 μ2 + Φ1 + Φ2))) +
            8 η^2 (-6 × (-5 + μ1) μ1 + θp (-60 - 69 μ2 + μ1^2 (-59 + 8 Φ1 + 3 Φ2) -
                    μ1 (89 + 345 μ2 - 23 Φ1 + 12 Φ2 + 30 μ2 Φ2)) +
            η (-176 μ1^2 + μ1 (472 - 171 μ2) + 45 × (4 + μ2) + θp
                (μ1 (-1094 + 219 Φ1 + 6 μ2 (-371 + 10 Φ1 - 26 Φ2) - 157 Φ2) +
                  μ1^2 (-462 + 39 Φ1 + 23 Φ2) - 2 × (316 + 54 μ2^2 -
                      30 Φ1 + 30 Φ2 + μ2 (507 - 30 Φ1 + 30 Φ2))))))) +
x^3 (-1 + η)^3 ((-1 + η) θp (60 η + 156 η^2 + 44 η^3 + 20 η^4 + 60 η^5 - 30 ηt -
        60 η ηt - 24 η^2 ηt - 80 η^3 ηt - 60 η^4 ηt - 80 η θp - 400 η^2
        θp - 400 η^3 θp - 32 ηt θp - 64 η ηt θp + 48 η μ1 + 252 η^2
        μ1 + 464 η^3 μ1 + 350 η^4 μ1 + 60 η^5 μ1 - 32 ηt μ1 - 148 η ηt
        μ1 - 120 η^2 ηt μ1 - 56 η^3 ηt μ1 - 60 η^4 ηt μ1 - 160 η θp
        μ1 - 800 η^2 θp μ1 - 800 η^3 θp μ1 - 64 ηt θp μ1 - 128 η ηt
        θp μ1 - 12 η μ1^2 + 24 η^2 μ1^2 + 180 η^3 μ1^2 + 150 η^4 μ1^2 + 22
        ηt μ1^2 + 104 η ηt μ1^2 + 48 η^2 ηt μ1^2 + 24 η^3 ηt μ1^2 - 80 η
        θp μ1^2 - 400 η^2 θp μ1^2 - 400 η^3 θp μ1^2 - 32 ηt θp μ1^2 - 64 η
        ηt θp μ1^2 + 32 η μ2 + 228 η^2 μ2 + 204 η^3 μ2 - 10 ηt μ2 - 27
        η ηt μ2 - 24 η^2 ηt μ2 - 192 η θp μ2 - 960 η^2 θp μ2 - 960
        η^3 θp μ2 - 48 ηt θp μ2 - 96 η ηt θp μ2 + 56 η μ1 μ2 + 12 η^2
        μ1 μ2 - 204 η^3 μ1 μ2 - 240 η^4 μ1 μ2 + 38 ηt μ1 μ2 + 117 η
        ηt μ1 μ2 + 192 η^2 ηt μ1 μ2 + 120 η^3 ηt μ1 μ2 - 192 η θp
        μ1 μ2 - 960 η^2 θp μ1 μ2 - 960 η^3 θp μ1 μ2 - 48 ηt θp μ1
        μ2 - 96 η ηt θp μ1 μ2 - 288 η θp μ2^2 - 1440 η^2 θp μ2^2 - 1440
        η^3 θp μ2^2 - 72 ηt θp μ2^2 - 144 η ηt θp μ2^2 + w^4 (-1 + η)^4
        (12 η^3 (1 + μ1) - 12 η^2 (-1 + ηt - 5 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
            2 × (5 + 3 μ1^2 + 11 μ2 + μ1 (8 + 5 μ2) -
                4 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
            2 η (-16 - 37 μ1 - 21 μ1^2 - 33 μ2 + 27 μ1 μ2 + 6 ηt (1 + μ1 - 3 μ1 μ2) +
                8 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
            ηt (12 - 38 μ1^2 + μ1 (22 - 17 μ2) - 5 μ2 + 4 θp (4 + 4 μ1^2 +
                    6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) - w (-1 + η) ×
        (90 η^5 (1 + μ1) + 10 η^4 (20 + 27 μ1^2 - 9 ηt (1 + μ1) + μ1 (65 - 36 μ2)) -
            4 × ((1 + μ1) × (-5 + μ1 - 3 μ2) + 2 θp (5 + 5 μ1^2 + 12 μ2 +
                    18 μ2^2 + 2 μ1 (5 + 6 μ2))) - 12 η^2 (-34 - 85 μ1 - 21 μ1^2 -
              62 μ2 + 34 μ1 μ2 + ηt (11 - 8 μ1^2 + μ1 (27 - 44 μ2) + 4 μ2) +
```

$$20\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)-4\,\eta^3$$
$$\Big(-63-313\,\mu 1-130\,\mu 1^2+\eta t\left(50-6\,\mu 1^2+\mu 1\,(44-60\,\mu 2)\right)-106\,\mu 2+$$
$$176\,\mu 1\,\mu 2+40\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)-$$
$$\eta t\Big(100-96\,\mu 1^2+\mu 1\,(148-139\,\mu 2)+29\,\mu 2+28\,\theta p$$
$$\left(4+4\,\mu 1^2+6\,\mu 2+9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\right)\Big)-$$
$$\eta\Big(\eta t\Big(204+460\,\mu 1-320\,\mu 1^2+81\,\mu 2-423\,\mu 1\,\mu 2+48\,\theta p$$
$$\left(4+8\,\mu 1+4\,\mu 1^2+6\,\mu 2+6\,\mu 1\,\mu 2+9\,\mu 2^2\right)\Big)+$$
$$4\times\Big(-54-75\,\mu 1-3\,\mu 1^2-65\,\mu 2-17\,\mu 1\,\mu 2+24\,\theta p$$
$$\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)\Big)\Big)+w^2$$
$$(-1+\eta)^2\Big(46+58\,\mu 1+30\,\eta^5\,(1+\mu 1)-10\,\eta^4\Big(3\,\eta t\,(1+\mu 1)-$$
$$4\times\left(4+3\,\mu 1^2+\mu 1\,(7-3\,\mu 2)\right)\Big)+50\,\mu 2+14\,\mu 1\,\mu 2-$$
$$24\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)-$$
$$4\,\eta^3\Big(-70-255\,\mu 1-125\,\mu 1^2+\eta t\,(40+\mu 1\,(40-30\,\mu 2))-55\,\mu 2+$$
$$161\,\mu 1\,\mu 2+20\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)-$$
$$12\,\eta^2\Big(-38-106\,\mu 1-38\,\mu 1^2-65\,\mu 2+61\,\mu 1\,\mu 2+$$
$$\eta t\left(15-4\,\mu 1^2+\mu 1\,(23-40\,\mu 2)+2\,\mu 2\right)+$$
$$20\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)-$$
$$\eta t\Big(124-164\,\mu 1^2+\mu 1\,(224-181\,\mu 2)+23\,\mu 2+36\,\theta p$$
$$\left(4+4\,\mu 1^2+6\,\mu 2+9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\right)\Big)-$$
$$\eta\Big(3\,\eta t\Big(80+164\,\mu 1-108\,\mu 1^2+27\,\mu 2-177\,\mu 1\,\mu 2+16\,\theta p$$
$$\left(4+8\,\mu 1+4\,\mu 1^2+6\,\mu 2+6\,\mu 1\,\mu 2+9\,\mu 2^2\right)\Big)+$$
$$2\times\Big(-155-278\,\mu 1-51\,\mu 1^2-249\,\mu 2+69\,\mu 1\,\mu 2+80\,\theta p$$
$$\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)\Big)\Big)-w^3$$
$$(-1+\eta)^3\Big(40+62\,\mu 1+10\,\mu 1^2+40\,\eta^4\,(1+\mu 1)+60\,\mu 2+12\,\mu 1\,\mu 2-$$
$$24\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)-$$
$$4\,\eta^3\left(-21-40\,\mu 1^2+10\,\eta t\,(1+\mu 1)+\mu 1\,(-61+36\,\mu 2)\right)-$$
$$4\,\eta^2\Big(\eta t\,(21+\mu 1\,(21-36\,\mu 2))-3\times\Big(14+23\,\mu 1^2+\mu 1\,(43-29\,\mu 2)+$$
$$22\,\mu 2\Big)+20\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)-$$
$$\eta t\Big(66-128\,\mu 1^2+\mu 1\,(130-97\,\mu 2)-\mu 2+20\,\theta p\Big(4+4\,\mu 1^2+6\,\mu 2+$$
$$9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\Big)\Big)-\eta\Big(6\times\Big(-31-63\,\mu 1-20\,\mu 1^2-56\,\mu 2+$$
$$34\,\mu 1\,\mu 2+16\,\theta p\left(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\right)\Big)+$$
$$\eta t\Big(16\,\theta p\left(4+4\,\mu 1^2+6\,\mu 2+9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\right)-$$
$$3\times\left(36\,\mu 1^2-9\times(4+\mu 2)+\mu 1\,(-64+87\,\mu 2)\right)\Big)\Big)\Big)\Big)+$$
$$(-1+\eta t)\,\theta l\,\Big(-10-60\,\eta-60\,\eta^2+10\,\theta p+142\,\eta\,\theta p+428\,\eta^2\,\theta p+380$$
$$\eta^3\,\theta p+60\,\eta^4\,\theta p-8\,\mu 1-64\,\eta\,\mu 1-164\,\eta^2\,\mu 1-80\,\eta^3\,\mu 1+16$$
$$\eta^4\,\mu 1+8\,\theta p\,\mu 1+248\,\eta\,\theta p\,\mu 1+802\,\eta^2\,\theta p\,\mu 1+528\,\eta^3\,\theta p$$
$$\mu 1-90\,\eta^4\,\theta p\,\mu 1+2\,\mu 1^2-4\,\eta\,\mu 1^2+28\,\eta^2\,\mu 1^2+16\,\eta^3\,\mu 1^2+16$$
$$\eta^4\,\mu 1^2-2\,\theta p\,\mu 1^2+70\,\eta\,\theta p\,\mu 1^2+302\,\eta^2\,\theta p\,\mu 1^2+268\,\eta^3$$
$$\theta p\,\mu 1^2+30\,\eta^4\,\theta p\,\mu 1^2-5\,\mu 2-20\,\eta\,\mu 2-15\,\eta^2\,\mu 2+26\,\theta p$$
$$\mu 2+324\,\eta\,\theta p\,\mu 2+746\,\eta^2\,\theta p\,\mu 2+408\,\eta^3\,\theta p\,\mu 2-20\,\eta^4\,\theta p$$
$$\mu 2+19\,\mu 1\,\mu 2+76\,\eta\,\mu 1\,\mu 2+57\,\eta^2\,\mu 1\,\mu 2+2\,\theta p\,\mu 1\,\mu 2+264$$
$$\eta\,\theta p\,\mu 1\,\mu 2+1142\,\eta^2\,\theta p\,\mu 1\,\mu 2+1440\,\eta^3\,\theta p\,\mu 1\,\mu 2+580$$
$$\eta^4\,\theta p\,\mu 1\,\mu 2+72\,\eta\,\theta p\,\mu 2^2+144\,\eta^2\,\theta p\,\mu 2^2+2\,w^4\,(-1+\eta)^4$$

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(-5 - 10 μ1 + μ1^2 + 5 μ2 + 5 μ1 μ2 + 5 η (-2 + 4 μ1^2 + μ1 (-4 + μ2) + μ2) +
   4 θp (5 + 5 μ1^2 + 12 μ2 + 10 μ1 (1 + 3 μ2)) +
   6 η θp (8 + 8 μ1^2 + 18 μ2 + 3 μ2^2 + 2 μ1 (8 + 21 μ2))) - 5
θp Φ1 - 30 η θp Φ1 - 30 η^2 θp Φ1 - 4 θp μ1 Φ1 - 50 η θp μ1
Φ1 - 129 η^2 θp μ1 Φ1 - 96 η^3 θp μ1 Φ1 - 10 η^4 θp μ1 Φ1 + θp
μ1^2 Φ1 - 2 η θp μ1^2 Φ1 - 27 η^2 θp μ1^2 Φ1 - 36 η^3 θp μ1^2
Φ1 - 10 η^4 θp μ1^2 Φ1 - 5 θp μ2 Φ1 - 30 η θp μ2 Φ1 - 30 η^2
θp μ2 Φ1 - 5 θp μ1 μ2 Φ1 - 30 η θp μ1 μ2 Φ1 - 30 η^2 θp
μ1 μ2 Φ1 + 5 θp Φ2 + 30 η θp Φ2 + 30 η^2 θp Φ2 + 4 θp μ1
Φ2 + 40 η θp μ1 Φ2 + 87 η^2 θp μ1 Φ2 + 44 η^3 θp μ1 Φ2 - 10
η^4 θp μ1 Φ2 - θp μ1^2 Φ2 - 8 η θp μ1^2 Φ2 - 15 η^2 θp μ1^2
Φ2 - 16 η^3 θp μ1^2 Φ2 - 10 η^4 θp μ1^2 Φ2 + 5 θp μ2 Φ2 + 30
η θp μ2 Φ2 + 30 η^2 θp μ2 Φ2 - 7 θp μ1 μ2 Φ2 - 6 η θp μ1
μ2 Φ2 + 102 η^2 θp μ1 μ2 Φ2 + 120 η^3 θp μ1 μ2 Φ2 - w^2
(-1 + η)^2 (-3 × (4 μ1^2 + 5 × (-4 + μ2) + μ1 (-28 + 29 μ2)) -
   θp (134 - 15 Φ1 - 5 μ2 (-70 + 3 Φ1 - 3 Φ2) - 26 μ1 (-9 + Φ1 - Φ2) +
      μ1^2 (88 + Φ1 - Φ2) + 15 Φ2 + μ1 μ2 (542 - 15 Φ1 + 3 Φ2)) +
   η^2 (-9 × (12 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
      2 θp (-678 - 216 μ2^2 + 45 Φ1 + μ1 μ2 (-3030 + 45 Φ1 - 81 Φ2) +
         2 μ1 (-637 + 66 Φ1 - 54 Φ2) + 15 μ2 (-74 + 3 Φ1 - 3 Φ2) -
         45 Φ2 + μ1^2 (-632 + 15 Φ1 + 9 Φ2))) + η (-60 μ1^2 +
      6 μ1 (76 - 43 μ2) + 30 × (8 + μ2) + θp μ1^2 (-788 + 3 Φ1 + 9 Φ2) +
      θp μ1 (-1822 + 183 Φ1 + 90 μ2 Φ1 - 171 Φ2 - 54 μ2 (69 + Φ2)) -
      2 θp (499 + 162 μ2^2 - 45 Φ1 + 45 Φ2 + μ2 (963 - 45 Φ1 + 45 Φ2))) +
   2 η^3 (-8 × (-5 + μ1) μ1 + 5 θp (-30 - 38 μ2 + μ1^2 (-44 + 3 Φ1 + Φ2) -
         μ1 (62 + 254 μ2 - 9 Φ1 + 5 Φ2 + 12 μ2 Φ2)))) -
w^3 (-1 + η)^3 (-40 - 68 μ1 + 8 μ1^2 + 25 μ2 + 49 μ1 μ2 + θp
      (104 μ1^2 + 5 × (24 - Φ1 + Φ2) + μ2 (304 - 5 Φ1 + 5 Φ2) +
         μ1 (224 - 11 Φ1 + 11 Φ2 + μ2 (640 - 5 Φ1 + 5 Φ2))) +
   η^2 (3 × (12 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) + 2 θp
         (232 + 240 μ1^2 + 72 μ2^2 - 15 Φ1 + 15 Φ2 + μ2 (376 - 15 Φ1 + 15 Φ2) +
            μ1 (472 - 33 Φ1 + 33 Φ2 + μ2 (1144 - 15 Φ1 + 15 Φ2)))) +
   2 η (-60 - 128 μ1 + 46 μ1^2 + 5 μ2 + 53 μ1 μ2 + θp (268 μ1^2 +
            5 × (56 + 18 μ2^2 - 3 Φ1 + 3 Φ2 + μ2 (112 - 3 Φ1 + 3 Φ2)) +
            μ1 (548 - 33 Φ1 + 33 Φ2 + μ2 (1352 - 15 Φ1 + 15 Φ2)))) + w
(-1 + η) × (40 + 44 μ1 - 8 μ1^2 + 5 μ2 - 67 μ1 μ2 + 2 η^4
      (10 θp μ2 + μ1^2 (-8 + 5 θp (-3 + Φ1 + Φ2)) +
         μ1 (-8 + 5 θp (15 - 58 μ2 + Φ1 + Φ2))) - θp (2 μ1^2 (11 + Φ1 - Φ2) +
         μ1 (94 - 19 Φ1 + 19 Φ2 - 3 μ2 (-48 + 5 Φ1 + 3 Φ2)) +
         3 × (5 × (4 - Φ1 + Φ2) + μ2 (56 - 5 Φ1 + 5 Φ2))) + 2 η^3
      (-16 × (-5 + μ1) μ1 + θp (-340 - 394 μ2 + μ1^2 (-354 + 33 Φ1 + 13 Φ2) -
            μ1 (574 + 1990 μ2 - 93 Φ1 + 47 Φ2 + 120 μ2 Φ2))) + η^2 (-100 μ1^2 +
         μ1 (476 - 171 μ2) + 45 × (4 + μ2) + 3 θp (μ1^2 (-362 + 19 Φ1 + 11 Φ2) +
            μ1 (-818 + 109 Φ1 + 30 μ2 Φ1 - 79 Φ2 - 78 μ2 (21 + Φ2)) -
```

$$
\begin{aligned}
&6 \times \left(76 + 24\,\mu 2^2 - 5\,\Phi 1 + 5\,\Phi 2 + \mu 2\,(123 - 5\,\Phi 1 + 5\,\Phi 2)\right)\Big)\Big) + \\
&\eta\,\Big(-4\,\mu 1^2 + \mu 1\,(304 - 238\,\mu 2) + 50 \times (4 + \mu 2) + \theta p \\
&\quad \Big(\mu 1\,(-1166 + 167\,\Phi 1 + 2\,\mu 2\,(-895 + 45\,\Phi 1 - 9\,\Phi 2) - 145\,\Phi 2) + \\
&\quad \mu 1^2\,(-418 + 5\,\Phi 1 + 17\,\Phi 2) - 2 \times \big(338 + 126\,\mu 2^2 - \\
&\quad 45\,\Phi 1 + 45\,\Phi 2 + \mu 2\,(673 - 45\,\Phi 1 + 45\,\Phi 2)\big)\Big)\Big)\Big)\Big) - \\
&x^2\,(-1 + \eta)^2\,\Big(4\,w^2\,\left(3 - 5\,w + 2\,w^2\right)\eta^9\,\theta p\,(1 + \mu 1) - 4\,w\,\eta^8\,\theta p\,\Big(9 \times (1 + \mu 1) + \\
&\quad w^3\,\left(7 - \mu 1 - 8\,\mu 1^2 + 2\,\eta t\,(1 + \mu 1) + 9\,\mu 1\,\mu 2\right) + w \\
&\quad \left(-11 - 23\,\mu 1 - 12\,\mu 1^2 + 3\,\eta t\,(1 + \mu 1) + 15\,\mu 1\,\mu 2\right) - w^2 \\
&\quad \left(6 - 14\,\mu 1 - 20\,\mu 1^2 + 5\,\eta t\,(1 + \mu 1) + 24\,\mu 1\,\mu 2\right)\Big) - \\
&\quad 2\,\eta^7\,\theta p\,\Big(-12 \times (1 + \mu 1) + 2\,w\,\left(7 + 27\,\mu 1^2 - 9\,\eta t\,(1 + \mu 1) + \mu 1\,(52 - 45\,\mu 2)\right) + \\
&\quad 2\,w^3\,\Big(6 - 16\,\mu 1 - 34\,\mu 1^2 + 44\,\mu 2 + 23\,\mu 1\,\mu 2 + 6\,\eta t\,(1 + \mu 1 + 4\,\mu 1\,\mu 2) - \\
&\quad 20\,\theta p\,\left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\right)\Big) + w^2 \\
&\quad \Big(17 - 96\,\mu 1 - 53\,\mu 1^2 + \eta t\,(22 + \mu 1\,(22 - 30\,\mu 2)) - 55\,\mu 2 + 113\,\mu 1\,\mu 2 + \\
&\quad 30\,\theta p\,\left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\right)\Big) + w^4 \\
&\quad \Big(-27 + 32\,\mu 1 + 59\,\mu 1^2 - 33\,\mu 2 - 57\,\mu 1\,\mu 2 + 12\,\theta p\,\Big(5 + 5\,\mu 1^2 + 12\,\mu 2 + \\
&\quad 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\Big) - 2\,\eta t\,(7 + \mu 1\,(7 + 9\,\mu 2))\Big)\Big) + \\
&\quad (1 + w)\,\Big(-w\,\Big(\theta l\,(5 + 24\,\theta p) \times (1 + \mu 1)\,\mu 2 + 2\,w\,\Big(-2\,\theta p^2\,\Big(5 + 5\,\mu 1^2 + \\
&\quad 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\Big) + \theta l \\
&\quad \left(5 \times (1 + \mu 1)\,\mu 2 + 2\,\theta p\,\left(5 + 8\,\mu 1 + 3\,\mu 1^2 + 18\,\mu 2 + 24\,\mu 1\,\mu 2\right)\right)\Big)\Big) + \\
&\quad w^2\,\Big(-4\,\theta p^2\,\Big(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\Big) + \\
&\quad \theta l\,\left(5 \times (1 + \mu 1)\,\mu 2 + 4\,\theta p\,\left(5 + 10\,\mu 1 + 5\,\mu 1^2 + 12\,\mu 2 + 30\,\mu 1\,\mu 2\right)\right)\Big)\Big) + \\
&\quad \eta t\,\Big(5\,w\,(1 + w)^2\,\theta l\,(1 + \mu 1)\,\mu 2 + 4\,(1 + w)^2\,(1 + 2\,w)\,\theta p^2 \\
&\quad \left(4 + 4\,\mu 1^2 + 6\,\mu 2 + 9\,\mu 2^2 + \mu 1\,(8 + 6\,\mu 2)\right) + \theta p\,\Big(10 + 8\,\mu 1 - 2\,\mu 1^2 + 5\,\mu 2 - \\
&\quad 19\,\mu 1\,\mu 2 - 6\,w\,\left(-5 + 3\,\mu 1^2 - 4\,\theta l\,\mu 2 + \mu 1\,(-6 - 4 \times (-2 + \theta l)\,\mu 2)\right) + \\
&\quad w^2\,\Big(30 + 48\,\mu 1 - 30\,\mu 1^2 - 15\,\mu 2 - 39\,\mu 1\,\mu 2 + 4\,\theta l\,\Big(5 + 3\,\mu 1^2 + 18\,\mu 2 + \\
&\quad 8\,\mu 1\,(1 + 3\,\mu 2)\Big)\Big) + 2\,w^3\,\Big(5 - 7\,\mu 1^2 - 5\,\mu 1\,(-2 + \mu 2) - \\
&\quad 5\,\mu 2 + 2\,\theta l\,\left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 10\,\mu 1\,(1 + 3\,\mu 2)\right)\Big)\Big)\Big)\Big) - \\
&\quad \eta^2\,\Big(\theta p\,\Big(60 - 120\,\theta p + 48\,\mu 1 - 88\,\eta t\,\mu 1 - 240\,\theta p\,\mu 1 - 12\,\mu 1^2 + 56\,\eta t\,\mu 1^2 - \\
&\quad 120\,\theta p\,\mu 1^2 + 28\,\mu 2 - 7\,\eta t\,\mu 2 - 288\,\theta p\,\mu 2 + 76\,\mu 1\,\mu 2 + 41\,\eta t\,\mu 1\,\mu 2 - \\
&\quad 288\,\theta p\,\mu 1\,\mu 2 - 432\,\theta p\,\mu 2^2 + 2\,w\,\Big(68 + 118\,\mu 1 + 14\,\mu 1^2 + 104\,\mu 2 + \\
&\quad 20\,\mu 1\,\mu 2 + 3\,\eta t\,\left(26 + 8\,\mu 1^2 + \mu 1\,(14 - 11\,\mu 2) + 5\,\mu 2\right) - \\
&\quad 48\,\theta p\,\left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\right) + \\
&\quad 38\,\eta t\,\theta p\,\left(4 + 4\,\mu 1^2 + 6\,\mu 2 + 9\,\mu 2^2 + \mu 1\,(8 + 6\,\mu 2)\right)\Big) - \\
&\quad 2\,w^4\,\Big(33 + 42\,\mu 1 + 9\,\mu 1^2 + 77\,\mu 2 + 83\,\mu 1\,\mu 2 - 28\,\theta p\,\Big(5 + 5\,\mu 1^2 + \\
&\quad 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\Big) + \eta t\,\Big(-4 - 4\,\mu 1 + 90\,\mu 1^2 - 25\,\mu 2 + \\
&\quad 17\,\mu 1\,\mu 2 + 10\,\theta p\,\left(4 + 8\,\mu 1 + 4\,\mu 1^2 + 6\,\mu 2 + 6\,\mu 1\,\mu 2 + 9\,\mu 2^2\right)\Big)\Big) + \\
&\quad 2\,w^2\,\Big(19 + 106\,\mu 1 + 51\,\mu 1^2 + 99\,\mu 2 - 123\,\mu 1\,\mu 2 - 18\,\theta p \\
&\quad \left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\right) + \\
&\quad 3\,\eta t\,\Big(54 + 100\,\mu 1 - 44\,\mu 1^2 + 17\,\mu 2 - 49\,\mu 1\,\mu 2 + \\
&\quad 24\,\theta p\,\left(4 + 8\,\mu 1 + 4\,\mu 1^2 + 6\,\mu 2 + 6\,\mu 1\,\mu 2 + 9\,\mu 2^2\right)\Big)\Big) + \\
&\quad w^3\,\Big(8 \times \Big(5\,\mu 1^2 - 14\,\mu 1\,(1 + 3\,\mu 2) - 2 \times (8 + 9\,\mu 2) + 12\,\theta p \\
&\quad \left(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5 + 6\,\mu 2)\right)\Big) +
\end{aligned}
$$

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                η t (180 + 440 μ1 - 436 μ1^2 + 115 μ2 - 221 μ1 μ2 +
                    48 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))))) +
        (-1 + η t) θl (2 × (7 μ1^2 + μ1 (16 - 19 μ2) + 5 × (3 + μ2)) +
            w^4 (-54 μ1^2 + 5 μ1 (-12 + μ2) + 5 × (-6 + μ2) +
                4 θp (80 + 80 μ1^2 + 174 μ2 + 45 μ2^2 + 10 μ1 (16 + 39 μ2))) +
            w^3 (-60 - 100 μ1^2 + 25 μ2 + μ1 (-76 + 49 μ2) + 12 θp
                (28 + 21 μ1^2 + 85 μ2 + 18 μ2^2 + μ1 (49 + 115 μ2))) +
            w^2 (6 × (-4 μ1^2 + 5 μ2 + 5 μ1 (2 + μ2)) + θp (-642 - 324 μ2^2 +
                    30 Φ1 + μ1 (-1246 + 79 Φ1 + μ2 (-2470 + 30 Φ1 - 42 Φ2) - 67 Φ2) +
                    10 μ2 (-79 + 3 Φ1 - 3 Φ2) - 30 Φ2 + μ1^2 (-616 + 7 Φ1 + 5 Φ2))) +
            θp (-216 μ2^2 + 6 × (-41 + 5 Φ1 - 5 Φ2) + 10 μ2 (-55 + 3 Φ1 - 3 Φ2) +
                μ1^2 (-160 + Φ1 + 7 Φ2) + μ1 (-442 + 49 Φ1 - 41 Φ2 +
                    μ2 (-526 + 30 Φ1 + 6 Φ2))) + 4 w (15 + 27 μ1 + 9 μ1^2 + 5 μ2 -
                13 μ1 μ2 + θp (-144 μ2^2 + μ1^2 (2 Φ1 + 3 × (-56 + Φ2)) +
                    μ2 (-412 + 15 Φ1 - 15 Φ2) + 15 × (-15 + Φ1 - Φ2) +
                    μ1 (32 Φ1 + μ2 (-640 + 15 Φ1 - 9 Φ2) - 27 × (15 + Φ2))))))) +
    η (θp (η t (50 - 18 μ1^2 + μ1 (56 - 57 μ2) + 15 μ2 + 20 θp (4 + 4 μ1^2 +
                6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) +
            w^2 (η t (68 - 76 μ1^2 + μ1 (196 - 101 μ2) + 91 μ2) + 60 θp
                (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) - 4 ×
                (23 + 25 μ2 + μ1 (29 + 7 μ2))) +
            4 w (2 × (1 + μ1) × (-5 + μ1 - 3 μ2) + 6 θp (5 + 5 μ1^2 + 12 μ2 +
                    18 μ2^2 + 2 μ1 (5 + 6 μ2)) + η t (30 + 52 μ1 - 17 μ1^2 + 12 μ2 -
                    36 μ1 μ2 + 11 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2))) -
            2 w^3 (40 + 62 μ1 + 10 μ1^2 + 60 μ2 + 12 μ1 μ2 - 20 θp (5 + 5 μ1^2 +
                    12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) + η t (14 + 6 μ1 + 10 μ1^2 - 49 μ2 -
                    μ1 μ2 + 26 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2))) -
            2 w^4 (η t (13 + 28 μ1 - 3 μ1^2 - 20 μ2 - 8 μ1 μ2 + 14 θp (4 + 8 μ1 +
                        4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) + 2 × (5 + 8 μ1 + 3 μ1^2 + 11 μ2 +
                    5 μ1 μ2 - θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))))) +
        (-1 + η t) θl (-10 - 8 μ1 + 2 μ1^2 - 5 μ2 + 19 μ1 μ2 + 2 w^4 (-5 ×
                (1 + μ1) × (1 + μ1 + μ2) + 36 θp (μ1^2 + (1 + μ2)^2 + μ1 (2 + 4 μ2))) +
            2 θp (18 + 18 μ2^2 - 5 Φ1 + μ1 μ2 (24 - 5 Φ1 - 7 Φ2) + μ1^2
                (6 + Φ1 - Φ2) + 5 Φ2 + 4 μ1 (6 - Φ1 + Φ2) + μ2 (48 - 5 Φ1 + 5 Φ2)) +
            w^2 (-3 × (8 μ1^2 + μ1 (28 - 19 μ2) + 5 × (4 + μ2)) + 2 θp (162 μ2^2 +
                    μ1^2 (194 + Φ1 - Φ2) + 3 × (82 - 5 Φ1 + 5 Φ2) + μ2 (536 - 15 Φ1 + 15
                        Φ2) + μ1 (452 - 26 Φ1 + 26 Φ2 + μ2 (836 - 15 Φ1 + 3 Φ2)))) +
            2 w (-2 μ1^2 - 5 × (4 + μ2) + μ1 (-22 + 31 μ2) + θp (2 μ1^2 (37 + Φ1 -
                        Φ2) + μ1 (206 - 19 Φ1 + 19 Φ2 - 3 μ2 (-98 + 5 Φ1 + 3 Φ2)) +
                    3 × (30 μ2^2 + 5 × (8 - Φ1 + Φ2) + μ2 (98 - 5 Φ1 + 5 Φ2)))) +
            2 w^3 (-2 × (7 μ1^2 - μ1 (-17 + μ2) + 5 × (2 + μ2)) + θp
                (176 + 166 μ1^2 + 126 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (362 - 5 Φ1 + 5 Φ2) +
                    μ1 (342 - 11 Φ1 + 11 Φ2 + μ2 (734 - 5 Φ1 + 5 Φ2))))))) +
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η^3 (θp (-44 - 44 ηt + 280 θp - 96 ηt θp - 120 μ1 - 72 ηt μ1 + 560 θp μ1 -
      192 ηt θp μ1 - 28 μ1^2 + 44 ηt μ1^2 + 280 θp μ1^2 - 96 ηt θp μ1^2 -
      124 μ2 - 11 ηt μ2 + 672 θp μ2 - 144 ηt θp μ2 + 68 μ1 μ2 - 11 ηt μ1 μ2 +
      672 θp μ1 μ2 - 144 ηt θp μ1 μ2 + 1008 θp μ2^2 - 216 ηt θp μ2^2 +
      2 w^4 (-21 + 8 μ1 + 29 μ1^2 - 55 μ2 - 247 μ1 μ2 + 40 θp (5 + 5 μ1^2 +
            12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) + 2 ηt (22 + 47 μ1 - 125 μ1^2 -
            15 μ1 μ2 + 10 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2))) +
      2 w^2 (171 + 232 μ1 + μ1^2 + 337 μ2 + 7 μ1 μ2 - 134 θp (5 + 5 μ1^2 + 12
             μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) + ηt (42 - 16 μ1 + 56 μ1^2 - 37 μ2 +
            137 μ1 μ2 + 36 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2))) +
      4 w^3 (40 + 108 μ1 + 44 μ1^2 + 112 μ2 - 203 μ1 μ2 - 24 θp
          (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) +
         ηt (64 + 144 μ1 - 166 μ1^2 - 5 μ2 - 5 μ1 μ2 +
            38 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2))) -
      4 w (ηt (30 + 104 μ1 - 79 μ1^2 + 18 μ2 - 54 μ1 μ2 + 15 θp
              (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) +
         2 × (-14 + 15 μ1 + 17 μ1^2 + μ2 - 59 μ1 μ2 + 3 θp (5 + 5 μ1^2 +
                12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))) + (-1 + ηt) θl
    (-20 - 56 μ1 - 5 μ2 + 19 μ1 μ2 + 4 w^4 (-29 μ1^2 + 5 μ1 (-2 + μ2) +
         5 × (-1 + μ2) + 8 θp (5 + 5 μ1^2 + 12 μ2 + 10 μ1 (1 + 3 μ2))) +
      θp (472 + 216 μ2^2 - 20 Φ1 + μ1^2 (350 - 17 Φ1 - 9 Φ2) +
         20 Φ2 + μ2 (806 - 20 Φ1 + 20 Φ2) +
         μ1 (870 - 85 Φ1 + 59 Φ2 + μ2 (1298 - 20 Φ1 + 68 Φ2))) -
      2 w^2 (-3 × (6 μ1^2 + μ1 (36 - 19 μ2) + 5 × (4 + μ2)) + θp (688 + 486 μ2^2 -
            45 Φ1 - 5 μ2 (-278 + 9 Φ1 - 9 Φ2) + μ1^2 (514 + 6 Φ1 - 2 Φ2) +
            45 Φ2 + μ1 (1250 - 69 Φ1 + μ2 (1978 - 45 Φ1 - 3 Φ2) + 73 Φ2))) -
      4 w^3 (2 × (16 μ1^2 + μ1 (-16 + μ2) - 5 × (1 + μ2)) + θp
          (252 + 259 μ1^2 + 162 μ2^2 - 10 Φ1 + 10 Φ2 + μ2 (419 - 10 Φ1 + 10 Φ2) +
            μ1 (511 - 22 Φ1 + 22 Φ2 + μ2 (1109 - 10 Φ1 + 10 Φ2))) +
      w (40 - 8 μ1 + 48 μ1^2 + 10 μ2 - 62 μ1 μ2 + θp (332 - 108 μ2^2 +
            30 Φ1 + μ1^2 (426 - 33 Φ1 - 5 Φ2) + 6 μ2 (23 + 5 Φ1 - 5 Φ2) - 30 Φ2 +
            μ1 (686 - 51 Φ1 + 13 Φ2 + 6 μ2 (369 + 5 Φ1 + 23 Φ2))))))) +
η^4 (78 θp + 24 ηt θp - 290 θl θp + 290 ηt θl θp - 100 θp^2 + 20 θl
    μ1 - 20 ηt θl μ1 - 68 θp μ1 - 56 ηt θp μ1 - 462 θl θp
    μ1 + 462 ηt θl θp μ1 - 200 θp^2 μ1 - 4 θl μ1^2 + 4 ηt θl
    μ1^2 - 74 θp μ1^2 + 16 ηt θp μ1^2 - 232 θl θp μ1^2 + 232
    ηt θl θp μ1^2 - 100 θp^2 μ1^2 + 46 θp μ2 - 16 ηt θp
    μ2 - 322 θl θp μ2 + 322 ηt θl θp μ2 - 240 θp^2 μ2 + 154
    θp μ1 μ2 + 68 ηt θp μ1 μ2 - 1210 θl θp μ1 μ2 + 1210
    ηt θl θp μ1 μ2 - 240 θp^2 μ1 μ2 - 360 θp^2 μ2^2 + w^4
    ((-1 + ηt) θl (124 μ1^2 - 5 × (4 + μ2) - 5 μ1 (8 + μ2) +
          12 θp (35 + 35 μ1^2 + 72 μ2 + 30 μ2^2 + 10 μ1 (7 + 15 μ2))) -
       2 θp (5 ηt (11 + 26 μ1 - 57 μ1^2 - 5 μ2 + 7 μ1 μ2 + 8 θp
              (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) +
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            2 × (22 + 57 μ1 + 35 μ1^2 + 55 μ2 - 170 μ1 μ2 - 5 θp
                (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))))) + 49
      θl θp μ1 Φ1 - 49 ηt θl θp μ1 Φ1 + 19 θl θp μ1^2 Φ1 - 19 ηt θl θp
      μ1^2 Φ1 - 21 θl θp μ1 Φ2 + 21 ηt θl θp μ1 Φ2 + 9 θl θp μ1^2
      Φ2 - 9 ηt θl θp μ1^2 Φ2 - 60 θl θp μ1 μ2 Φ2 + 60 ηt θl θp μ1
      μ2 Φ2 + w^3 (8 θp (-47 + 2 μ1^2 - 104 μ2 + μ1 (-63 + 58 μ2) +
            33 θp (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2))) -
         ηt θp (44 - 236 μ1^2 - 145 μ2 + μ1 (24 + 455 μ2) +
            68 θp (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) +
         (-1 + ηt) θl (-80 - 160 μ1 + 64 μ1^2 + 5 μ2 + 53 μ1 μ2 +
            4 θp (205 μ1^2 + 180 μ2^2 + 5 × (46 - Φ1 + Φ2) + μ2 (527 - 5 Φ1 + 5 Φ2) +
               μ1 (435 - 11 Φ1 + 11 Φ2 + μ2 (917 - 5 Φ1 + 5 Φ2))))) + w
      (θp (ηt (128 + 116 μ1 - 132 μ1^2 + 17 μ2 + 161 μ1 μ2 + 72 θp
               (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) +
            4 × (49 + 107 μ1 + 16 μ1^2 + 130 μ2 - 68 μ1 μ2 - 54 θp
               (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))) +
         (-1 + ηt) θl (μ1 (120 - 57 μ2) + 15 × (4 + μ2) + θp
            (μ1 (-1706 + 123 Φ1 + μ2 (-2186 + 60 Φ1 - 36 Φ2) - 113 Φ2) +
               μ1^2 (-654 + 3 Φ1 + 7 Φ2) - 2 × (466 + 324 μ2^2 -
                  30 Φ1 + 30 Φ2 + μ2 (883 - 30 Φ1 + 30 Φ2))))) + w^2
      (- ((-1 + ηt) θl (44 μ1^2 - 15 μ2 - μ1 (64 + 15 μ2))) + 12 θp^2
            (-5 - 5 μ1^2 - 12 μ2 - 18 μ2^2 - 2 μ1 (5 + 6 μ2) +
            9 ηt (4 + 4 μ1^2 + 6 μ2 + 9 μ2^2 + μ1 (8 + 6 μ2))) +
         θp (-48 + 500 μ1 + 356 μ1^2 + 56 μ2 - 832 μ1 μ2 + ηt (192 + 556 μ1 -
               440 μ1^2 + 149 μ2 - 331 μ1 μ2 + 2 θl (-496 - 162 μ2^2 + 15 Φ1 +
                  μ1 (-982 + 62 Φ1 + μ2 (-2398 + 15 Φ1 - 51 Φ2) - 46 Φ2) +
                  μ2 (-634 + 15 Φ1 - 15 Φ2) - 15 Φ2 +
                  μ1^2 (-522 + 11 Φ1 + 5 Φ2))) + 2 θl (496 + 162 μ2^2 - 15 Φ1 +
               μ1^2 (522 - 11 Φ1 - 5 Φ2) + 15 Φ2 + μ2 (634 - 15 Φ1 + 15 Φ2) +
               μ1 (982 - 62 Φ1 + 46 Φ2 + μ2 (2398 - 15 Φ1 + 51 Φ2))))))) +
η^6 (-4 θp (2 - 15 μ1^2 + 6 ηt (1 + μ1) + μ1 (-31 + 30 μ2)) + w^4
      ((-1 + ηt) θl (14 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2) +
            12 θp (14 + 14 μ1^2 + 30 μ2 + 9 μ2^2 + μ1 (28 + 66 μ2))) -
         2 θp (55 - 6 μ1 - 61 μ1^2 + 143 μ2 + 5 μ1 μ2 - 48 θp (5 + 5 μ1^2 +
               12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)) + ηt (22 + 32 μ1 - 32 μ1^2 - 5 μ2 +
               73 μ1 μ2 + 6 θp (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)))) +
   w^3 (θp (ηt (4 + 88 μ1 - 84 μ1^2 + 27 μ2 + 123 μ1 μ2 + 24 θp
               (4 + 8 μ1 + 4 μ1^2 + 6 μ2 + 6 μ1 μ2 + 9 μ2^2)) -
            8 × (-8 - 40 μ1 - 17 μ1^2 - 46 μ2 + 44 μ1 μ2 + 22 θp
               (5 + 5 μ1^2 + 12 μ2 + 18 μ2^2 + 2 μ1 (5 + 6 μ2)))) -
         (-1 + ηt) θl (4 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2) +
            4 θp (124 + 130 μ1^2 + 54 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (202 - 5 Φ1 + 5 Φ2) +
               μ1 (254 - 11 Φ1 + 11 Φ2 + μ2 (598 - 5 Φ1 + 5 Φ2))))) + w
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$$
\begin{aligned}
&\Big(-4\times(-1+\eta t)\,\theta l\,\mu 1\,(1+\mu 1)+120\,\theta p^2\,\big(5+5\,\mu 1^2+12\,\mu 2+\\
&\quad 18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\big)+\theta p\,\big(16-2\times(108+5\,\theta l)\,\mu 2+\\
&\quad \mu 1\,(-124+96\,\mu 2+\theta l\,(-34+410\,\mu 2-5\,\Phi 1-5\,\Phi 2))-\\
&\quad \mu 1^2\,(44+\theta l\,(-38+5\,\Phi 1+5\,\Phi 2))+\\
&\quad \eta t\,\big(28+10\,\theta l\,\mu 2+\mu 1^2\,(-16+\theta l\,(-38+5\,\Phi 1+5\,\Phi 2))+\\
&\qquad \mu 1\,(12-120\,\mu 2+\theta l\,(34-410\,\mu 2+5\,\Phi 1+5\,\Phi 2))\big)\big)\big)-w^2\\
&\Big(-4\times(-1+\eta t)\,\theta l\,(-5+\mu 1)\,\mu 1+60\,\theta p^2\,\big(5+5\,\mu 1^2+12\,\mu 2+\\
&\quad 18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\big)+\theta p\,\big(-42+380\,\mu 1+302\,\mu 1^2-\\
&\quad 190\,\mu 2-454\,\mu 1\,\mu 2-5\,\theta l\,\big(-50-62\,\mu 2+\mu 1^2\,(-72+3\,\Phi 1+\Phi 2)-\\
&\qquad \mu 1\,(110+398\,\mu 2-9\,\Phi 1+5\,\Phi 2+12\,\mu 2\,\Phi 2)\big)+\\
&\quad \eta t\,\big(-4\times\big(21+8\,\mu 1^2-4\,\mu 2+5\,\mu 1\,(1+7\,\mu 2)\big)+\\
&\qquad 5\,\theta l\,\big(-50-62\,\mu 2+\mu 1^2\,(-72+3\,\Phi 1+\Phi 2)-\\
&\qquad\quad \mu 1\,(110+398\,\mu 2-9\,\Phi 1+5\,\Phi 2+12\,\mu 2\,\Phi 2)\big)\big)\big)\big)\big)-\\
&\eta^5\,\big(-10\,\theta p+16\,\eta t\,\theta p+24\,\theta l\,\theta p-24\,\eta t\,\theta l\,\theta p+300\,\theta p^2+4\,\theta l\,\mu 1-4\\
&\quad \eta t\,\theta l\,\mu 1-88\,\theta p\,\mu 1-10\,\theta l\,\theta p\,\mu 1+10\,\eta t\,\theta l\,\theta p\,\mu 1+600\\
&\quad \theta p^2\,\mu 1+4\,\theta l\,\mu 1^2-4\,\eta t\,\theta l\,\mu 1^2-30\,\theta p\,\mu 1^2-16\,\eta t\,\theta p\\
&\quad \mu 1^2+38\,\theta l\,\theta p\,\mu 1^2-38\,\eta t\,\theta l\,\theta p\,\mu 1^2+300\,\theta p^2\,\mu 1^2-106\\
&\quad \theta p\,\mu 2-10\,\theta l\,\theta p\,\mu 2+10\,\eta t\,\theta l\,\theta p\,\mu 2+720\,\theta p^2\,\mu 2+26\\
&\quad \theta p\,\mu 1\,\mu 2-60\,\eta t\,\theta p\,\mu 1\,\mu 2+410\,\theta l\,\theta p\,\mu 1\,\mu 2-410\\
&\quad \eta t\,\theta l\,\theta p\,\mu 1\,\mu 2+720\,\theta p^2\,\mu 1\,\mu 2+1080\,\theta p^2\,\mu 2^2+2\,w^4\\
&\quad \big((-1+\eta t)\,\theta l\,\big(33\,\mu 1^2+5\,\mu 1\,(-6+\mu 2)+5\times(-3+\mu 2)+\\
&\qquad 4\,\theta p\,\big(65+65\,\mu 1^2+138\,\mu 2+45\,\mu 2^2+10\,\mu 1\,(13+30\,\mu 2)\big)\big)-\\
&\qquad \theta p\,\big(20\times\big(4+\mu 1^2+\mu 1\,(5-10\,\mu 2)+11\,\mu 2\big)-62\,\theta p\,\big(5+5\,\mu 1^2+12\,\mu 2+\\
&\qquad\quad 18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\big)+\eta t\,\big(35-153\,\mu 1^2-20\,\mu 2+20\,\mu 1\\
&\qquad\quad (4+5\,\mu 2)+26\,\theta p\,\big(4+4\,\mu 1^2+6\,\mu 2+9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\big)\big)\big)\big)-\\
&\quad 5\,\theta l\,\theta p\,\mu 1\,\Phi 1+5\,\eta t\,\theta l\,\theta p\,\mu 1\,\Phi 1-5\,\theta l\,\theta p\,\mu 1^2\,\Phi 1+5\,\eta t\,\theta l\,\theta p\,\mu 1^2\\
&\quad \Phi 1-5\,\theta l\,\theta p\,\mu 1\,\Phi 2+5\,\eta t\,\theta l\,\theta p\,\mu 1\,\Phi 2-5\,\theta l\,\theta p\,\mu 1^2\,\Phi 2+5\,\eta t\,\theta l\\
&\quad \theta p\,\mu 1^2\,\Phi 2+w^2\,\big(3\,\theta p\,\big(\eta t\,\big(36+56\,\mu 1-52\,\mu 1^2+11\,\mu 2+83\,\mu 1\,\mu 2+\\
&\qquad 24\,\theta p\,\big(4+8\,\mu 1+4\,\mu 1^2+6\,\mu 2+6\,\mu 1\,\mu 2+9\,\mu 2^2\big)\big)-\\
&\qquad 4\times\big(-19-46\,\mu 1-9\,\mu 1^2-61\,\mu 2+36\,\mu 1\,\mu 2+25\,\theta p\\
&\qquad\quad \big(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\big)\big)\big)-(-1+\eta t)\,\theta l\\
&\qquad \big(4\,\mu 1^2-15\times(4+\mu 2)+\mu 1\,(-116+57\,\mu 2)+2\,\theta p\,\big(482+324\,\mu 2^2-\\
&\qquad\quad 30\,\Phi 1+\mu 1^2\,(348+5\,\Phi 1-\Phi 2)+30\,\Phi 2+\mu 2\,(890-30\,\Phi 1+30\,\Phi 2)+\\
&\qquad\quad \mu 1\,(866-43\,\Phi 1+47\,\Phi 2-2\,\mu 2\,(-625+15\,\Phi 1+3\,\Phi 2))\big)\big)\big)+w\\
&\quad \big(4\times(-1+\eta t)\,\theta l\,(-11+\mu 1)\,\mu 1+\theta p\,\big(84-328\,\mu 1-244\,\mu 1^2+\\
&\qquad 64\,\mu 2+412\,\mu 1\,\mu 2-6\,\theta l\,(90+107\,\mu 2)+4\,\eta t\,\big(19+8\,\mu 1^2-\\
&\qquad\quad 8\,\mu 2+7\,\mu 1\,(-3+4\,\mu 2)\big)+\theta l\,\mu 1^2\,(-554+29\,\Phi 1+9\,\Phi 2)-\\
&\qquad \theta l\,\mu 1\,(1046-89\,\Phi 1+51\,\Phi 2+30\,\mu 2\,(93+4\,\Phi 2))+\\
&\qquad \eta t\,\theta l\,\big(540+642\,\mu 2+\mu 1^2\,(554-29\,\Phi 1-9\,\Phi 2)+\\
&\qquad\quad \mu 1\,(1046-89\,\Phi 1+51\,\Phi 2+30\,\mu 2\,(93+4\,\Phi 2))\big)\big)\big)+2\\
&\quad w^3\,\big(2\times(-1+\eta t)\,\theta l\,\big(\mu 1^2-\mu 1\,(-7+\mu 2)+5\,\mu 2\big)+6\,\theta p^2\\
&\qquad \big(2\times\big(5+5\,\mu 1^2+12\,\mu 2+18\,\mu 2^2+2\,\mu 1\,(5+6\,\mu 2)\big)+\\
&\qquad 3\,\eta t\,\big(4+4\,\mu 1^2+6\,\mu 2+9\,\mu 2^2+\mu 1\,(8+6\,\mu 2)\big)\big)+
\end{aligned}
$$

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                    θp (2 × (-31 + 81 μ1^2 + μ1 (56 - 96 μ2) - 42 μ2) + 3 θl
                        (88 + 104 μ1^2 + 18 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (92 - 5 Φ1 + 5 Φ2) +
                          μ1 (192 - 11 Φ1 + 11 Φ2 + μ2 (476 - 5 Φ1 + 5 Φ2))) -
                      ηt (-22 - 126 μ1 + 70 μ1^2 - 55 μ2 + 137 μ1 μ2 + 3 θl
                          (88 + 104 μ1^2 + 18 μ2^2 - 5 Φ1 + 5 Φ2 + μ2 (92 - 5 Φ1 + 5 Φ2) +
                            μ1 (192 - 11 Φ1 + 11 Φ2 + μ2 (476 - 5 Φ1 + 5 Φ2)))))))))) /
    (96 x (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
      (w +
         x +
         η -
         w
          η - x
          η)^3 (-1 + ηt) θl))
```

$\beta\theta l =$

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 - ((-cv cσ (w (-1 + η) + x (-1 + η) - η) (-1 + η) (x^2 (-1 + η)^2 + η (1 + η) + x (1 + η - 2 η^2))^2
        ((x + η - x η)^2 (-1 + ηt) θl θp (1 + μ1) × (14 x (-1 + η) - 14 η - 5 × (2 + Φ1 + Φ2)) +
          w (-1 + η) × (-4 x^3 (-1 + η)^3 θp
              (1 - 8 θl + 7 μ1 - 14 θl μ1 + 3 η^2 (1 + μ1) - η ηt (1 + 2 θl) × (1 + μ1) + 2 η
                (-2 + θl - 5 μ1 + θl μ1) + ηt (1 + 8 θl + μ1 + 14 θl μ1)) + x^2 (-1 + η)^2 θp
              (36 η^3 (1 + μ1) - 12 η^2 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-2 + θl - 5 μ1 + θl μ1)) +
                12 η (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 + 2 θl (4 + 7 μ1))) +
                (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2)) - x (-1 + η) ×
              (12 × (-1 + η) η^2 θp (-1 - 7 μ1 + 3 η (1 + μ1) - ηt (1 + μ1)) - (-1 + ηt) θl
                (20 × (1 + μ1) + θp (24 η^3 (1 + μ1) - 24 η^2 (4 + 7 μ1) + 5 × (-6 - 3 Φ1 + Φ2) -
                    2 η (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) - μ1 (30 + 15 Φ1 + 19 Φ2)))) +
            θp (12 η^5 (1 + μ1) + 20 ηt (1 + μ1) - 4 η^4 (ηt (1 + 2 θl) × (1 + μ1) - 2 ×
                  (-2 + θl - 5 μ1 + θl μ1)) + 4 η^3 (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 +
                    2 θl (4 + 7 μ1))) + η^2 (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) +
                η (-20 ηt (1 + μ1) - 5 θl (6 + 3 Φ1 - Φ2) - θl μ1 (30 + 15 Φ1 + 19 Φ2) +
                  ηt θl (5 × (6 + 3 Φ1 - Φ2) + μ1 (30 + 15 Φ1 + 19 Φ2)))) + w^4 (-1 + η)^4
            (x (-1 + η) × (4 × (-1 + η) θp (1 - 5 μ1 + η (1 + μ1) - ηt (1 + μ1)) + (-1 + ηt)
                  θl (-20 × (1 + μ1) + 5 θp (8 + 3 Φ1 - Φ2) + θp μ1 (64 + 15 Φ1 + 19 Φ2))) +
            θp (-4 η^3 (1 + μ1) - 20 ηt (1 + μ1) + 4 η^2 (ηt + 6 μ1 + ηt μ1) + η (4 - 20 μ1 +
                  16 ηt (1 + μ1) + θl (40 + 64 μ1 + 15 Φ1 + 15 μ1 Φ1 - 5 Φ2 + 19 μ1 Φ2) -
                  ηt θl (5 × (8 + 3 Φ1 - Φ2) + μ1 (64 + 15 Φ1 + 19 Φ2)))) +
          w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (-2 - 5 θl + 10 μ1 - 17 θl μ1 + 2 η^2
                (1 + μ1) - 2 η (ηt + 6 μ1 + ηt μ1) + ηt (2 + 5 θl + 2 μ1 + 17 θl μ1)) -
            x^2 (-1 + η)^2 θp (8 - 94 θl + 56 μ1 - 142 θl μ1 + 12 η^3 (1 + μ1) + 8 ηt (1 + μ1) -
                12 η^2 (-2 + ηt + 4 μ1 + ηt μ1) + 2 η (-22 - 7 θl - 10 μ1 - 43 θl μ1 +
                  ηt (2 + 7 θl + 2 μ1 + 43 θl μ1)) - 15 θl Φ1 - 15 θl μ1 Φ1 - 15 θl Φ2 - 15
                θl μ1 Φ2 + ηt θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))) +
            x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) - 3 η (-5 + ηt + μ1 + ηt μ1) -
                  4 × (1 + ηt + 7 μ1 + ηt μ1)) + (-1 + ηt) θl (-60 × (1 + μ1) +
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                θp (104 + η^2 (-2 + 70 μ1) + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2) +
                    2 η (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)))))) +
            θp (-4 η^5 (1 + μ1) - 60 ηt (1 + μ1) + 4 η^4 (-6 + ηt + ηt μ1) + η^3
                (36 + 60 μ1 + 6 θl (-1 + 3 μ1) + ηt (4 + 6 θl + 4 μ1 - 18 θl μ1)) + η
                (60 ηt (1 + μ1) + θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2)) -
                  ηt θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2))) - η^2
                (8 + 56 μ1 - θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)) + ηt
                  (8 × (1 + μ1) + θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)))))) +
        w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (-8 - 30 θl + 40 μ1 - 78 θl μ1 + 8 η^2 (1 + μ1) -
              8 η (ηt + 6 μ1 + ηt μ1) - 5 θl Φ1 - 5 θl μ1 Φ1 - 5 θl Φ2 - 5 θl μ1 Φ2 + ηt
                (8 × (1 + μ1) + 5 θl (6 + Φ1 + Φ2) + θl μ1 (78 + 5 Φ1 + 5 Φ2)) -
            x (-1 + η) × (4 × (-1 + η) θp (-1 - 7 μ1 + 4 η^2 (1 + μ1) - ηt (1 + μ1) -
                  η (-7 + 17 μ1 + 4 ηt (1 + μ1))) + (-1 + ηt) θl
                (-60 × (1 + μ1) + θp (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2) +
                    2 η (26 + 5 Φ1 + 5 Φ2 + μ1 (74 + 5 Φ1 + 5 Φ2))))) +
            θp (8 η^4 (1 + μ1) + 60 ηt (1 + μ1) - 4 η^3 (-3 + 9 μ1 + 2 ηt (1 + μ1)) +
                η^2 (-24 - θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)) +
                    ηt (4 × (1 + μ1) + θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)))) + η (4 + 28
                    μ1 - θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2)) + ηt (-56 × (1 +
                        μ1) + θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2))))))) -
    (1 + x + η - x η)^2 θl (24 cv^2 (-1 + w (-1 + η))^3 (x + η - x η)^3 (w + x + η - w η - x η)^3
        (-1 + ηt) θp +
        f (-4 w^6 (-1 + η)^6 (x + η - x η)^3 (-1 + ηt) θl θp
            (2 × (-4 + Φ2) + θl (8 - 4 Φ2 + 5 Φ2^2)) + 2 w^5 (-1 + η)^5
            (6 x^4 (-1 + η)^4 (-1 + ηt) θl θp (2 × (-4 + Φ2) + θl (8 - 4 Φ2 + 5 Φ2^2)) + 2
                x^3 (-1 + η)^3 (-3 × (1 + 4 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
                  (-1 + η)^2 θp (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) +
                  (-1 + ηt) θl (12 - 5 Φ2 - 3 θp (14 + 3 Φ1 + 5 Φ2) +
                    η (-12 + 3 θp (54 + 3 Φ1 - 5 Φ2) + 5 Φ2))) - x^2 (-1 + η)^2
                (60 η^5 θp - 6 η^4 θp (5 + 10 ηt + Φ2) + ηt θp (-31 + 10 Φ2) +
                  6 η^3 θp (-74 - 3 Φ2 + ηt (5 + Φ2)) + η^2 ((-1 + ηt) θl (-41 + 18 θp
                        (38 + 3 Φ1 - Φ2) + 20 Φ2) + θp (738 + ηt (89 - 2 Φ2) + 54 Φ2) -
                    36 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2)) - η (18 × (-1 + ηt)
                     θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 2 θp (7 ηt (2 + Φ2) + 3 × (54 + 5 Φ2)) +
                    (-1 + ηt) θl (-41 + 20 Φ2 + 18 θp (14 + 3 Φ1 + 5 Φ2)))) + x (-1 + η)
                η (60 η^5 θp - 6 η^4 θp (5 + 10 ηt + Φ2) + ηt θp (-61 + 20 Φ2) +
                  6 η^3 θp (-74 - 3 Φ2 + ηt (5 + Φ2)) - η (2 θp (162 - 16 ηt + 15 Φ2 +
                        17 ηt Φ2) + 18 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
                    (-1 + ηt) θl (-11 + 10 Φ2 + 18 θp (14 + 3 Φ1 + 5 Φ2))) +
                  η^2 (-24 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt)
                     θl (-11 + 10 Φ2 + 6 θp (98 + 9 Φ1 + Φ2)) +
                    θp (738 + 54 Φ2 + ηt (59 + 8 Φ2))) - 2 η^2 θp (10 η^5 - η^4
                  (5 + 10 ηt + Φ2) + ηt (-12 + 5 Φ2) + η^3 (-74 - 3 Φ2 + ηt (5 + Φ2)) +
                  η^2 (ηt (8 + 3 Φ2 + 3 θl (30 + 3 Φ1 + Φ2) - 3 θl^2 (8 - 4 Φ2 + 5 Φ2^2)) +
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            3 × (41 + 3 Φ2 - θl (30 + 3 Φ1 + Φ2) + θl^2 (8 - 4 Φ2 + 5 Φ2^2))) -
        η (54 + 5 Φ2 - 3 θl (14 + 3 Φ1 + 5 Φ2) - 3 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + 3 ηt
            (3 × (-1 + Φ2) + θl (14 + 3 Φ1 + 5 Φ2) + θl^2 (8 - 4 Φ2 + 5 Φ2^2)))) -
(x + η - x η)^2 (-2 x^4 (-1 + η)^4 θp (-108 + 60 η^4 + 92 θl + 16 θl^2 -
        6 Φ2 + 24 θl Φ2 - 8 θl^2 Φ2 + 5 θl Φ2^2 + 10 θl^2 Φ2^2 -
        4 η^3 (35 - 5 θl + 5 ηt (2 + θl) + Φ2) + 2 η^2 (-4 + θl (-15 + Φ2) + Φ2 +
            ηt (45 - θl (-15 + Φ2) + Φ2)) + η (196 + 8 Φ2 - 4 ηt (15 + Φ2) -
            θl (98 + 22 Φ2 + 5 Φ2^2) + ηt θl (98 + 22 Φ2 + 5 Φ2^2)) -
        ηt (-2 × (5 + Φ2) + 2 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (92 + 24 Φ2 + 5 Φ2^2))) +
    2 x^3 (-1 + η)^3 (-8 η (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 8 (-1 + η)^2
            η θp (30 η^2 + ηt (5 + Φ2) - 3 × (18 + Φ2) - 2 η (5 + 10 ηt + Φ2)) -
        (-1 + ηt) θl (80 η^4 θp + 8 η^3 θp (-15 + Φ2) + 10 × (-2 + Φ2) - 10 η
            (-2 + Φ2) + θp (20 + 24 Φ1 - 5 Φ2^2) - 4 η^2 θp (98 + 22 Φ2 + 5 Φ2^2) +
            η θp (348 - 24 Φ1 + 96 Φ2 + 25 Φ2^2))) - x^2 (-1 + η)^2 (720 η^6 θp -
        24 η^4 θp (4 + ηt (-45 + θl (-15 + Φ2) - Φ2) - θl (-15 + Φ2) - Φ2) -
        48 η^5 θp (35 - 5 θl + 5 ηt (2 + θl) + Φ2) + 10 ηt θp (-3 + 2 Φ2) +
        12 η^3 θp (196 + 8 Φ2 - 4 ηt (15 + Φ2) - θl (98 + 22 Φ2 + 5 Φ2^2) +
            ηt θl (98 + 22 Φ2 + 5 Φ2^2)) + η^2 (-24 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 +
                5 Φ2^2) + 2 θp (-36 × (18 + Φ2) + ηt (45 + 22 Φ2)) + (-1 + ηt) θl
            (20 × (-5 + 2 Φ2) + θp (-974 + 141 Φ1 - 283 Φ2 - 90 Φ2^2))) +
        η (20 ηt θp (3 - 2 Φ2) - (-1 + ηt) θl (141 θp Φ1 + 20 × (-5 + 2 Φ2) +
                5 θp (26 + Φ2 - 6 Φ2^2)))) + η^2 θp (-120 η^6 + 38 ηt +
        4 η^4 (4 + ηt (-45 + θl (-15 + Φ2) - Φ2) - θl (-15 + Φ2) - Φ2) -
        20 ηt Φ2 + 8 η^5 (35 - 5 θl + 5 ηt (2 + θl) + Φ2) -
        2 η^3 (196 + 8 Φ2 - 4 ηt (15 + Φ2) - θl (98 + 22 Φ2 + 5 Φ2^2) +
            ηt θl (98 + 22 Φ2 + 5 Φ2^2)) + η (θl (-38 - 39 Φ1 + Φ2 + 10 Φ2^2) +
            ηt (-76 + 40 Φ2 + θl (38 + 39 Φ1 - Φ2 - 10 Φ2^2))) +
        η^2 (12 × (18 + Φ2) + θl (-146 + 39 Φ1 - 49 Φ2 - 20 Φ2^2) -
            4 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + ηt (18 - 24 Φ2 + 4 θl^2 (8 - 4 Φ2 + 5 Φ2^2) +
                θl (146 - 39 Φ1 + 49 Φ2 + 20 Φ2^2)))) + 2 x (-1 + η) η (240 η^6 θp -
        8 η^4 θp (4 + ηt (-45 + θl (-15 + Φ2) - Φ2) - θl (-15 + Φ2) - Φ2) -
        16 η^5 θp (35 - 5 θl + 5 ηt (2 + θl) + Φ2) + 4 ηt θp (-13 + 5 Φ2) +
        4 η^3 θp (196 + 8 Φ2 - 4 ηt (15 + Φ2) - θl (98 + 22 Φ2 + 5 Φ2^2) +
            ηt θl (98 + 22 Φ2 + 5 Φ2^2)) + η (8 ηt θp (13 - 5 Φ2) -
            (-1 + ηt) θl (2 × (-6 + 5 Φ2) + θp (64 + 66 Φ1 + 2 Φ2 - 15 Φ2^2))) -
        η^2 (8 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 4 θp
            (ηt (3 - 7 Φ2) + 6 × (18 + Φ2)) + (-1 + ηt) θl
            (12 - 10 Φ2 + θp (304 - 66 Φ1 + 94 Φ2 + 35 Φ2^2))))) +
w (x (-1 + η) - η) (-1 + η) × (-4 x^5 (-1 + η)^5 θp (-148 + 30 η^4 +
        124 θl + 24 θl^2 - 8 Φ2 + 24 θl Φ2 - 12 θl^2 Φ2 + 5 θl Φ2^2 + 15 θl^2 Φ2^2 -
        3 η^3 (5 + 10 ηt + Φ2) + η^2 (2 ηt (25 + Φ2) + θl (35 + Φ2) -
            ηt θl (35 + Φ2) - 2 × (104 + Φ2)) + η (341 + 13 Φ2 - 2 ηt (5 + 2 Φ2) -
            θl (183 + 19 Φ2 + 5 Φ2^2) + ηt θl (183 + 19 Φ2 + 5 Φ2^2)) - ηt
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      (-2 × (-5 + Φ2) + 3 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (124 + 24 Φ2 + 5 Φ2^2))) +
4 x^4 (-1 + η)^4 (-3 × (1 + 5 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
    (-1 + η)^2 θp (150 η^3 + 2 η (-385 + 5 ηt (-11 + Φ2) - 23 Φ2) +
        3 ηt (5 + Φ2) - 9 × (18 + Φ2) - 15 η^2 (-21 + 10 ηt + Φ2)) -
    (-1 + ηt) θl (15 × (-2 + Φ2) - 15 η (-2 + Φ2) + 5 η^3 θp (41 + Φ2) +
        12 θp (14 + 3 Φ1 + 3 Φ2) + η θp (443 - 36 Φ1 + 87 Φ2 + 25 Φ2^2) -
        η^2 θp (960 + 92 Φ2 + 25 Φ2^2))) + x^3
  (-1 + η)^3 (24 η (2 + 5 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
    (-1 + ηt) θl (-136 + 60 η^2 (7 - 3 Φ2) + 40 Φ2 + 40 η^4 θp (47 + Φ2) +
        4 η (-71 + 35 Φ2) + 4 θp (34 + 27 Φ1 + 7 Φ2 - 5 Φ2^2) + η θp (2582 +
            459 Φ1 + 563 Φ2 + 20 Φ2^2) - 8 η^3 θp (1005 + 89 Φ2 + 25 Φ2^2) +
        η^2 θp (2098 - 567 Φ1 + 417 Φ2 + 200 Φ2^2)) - 2 (-1 + η)^2 θp
      (600 η^4 + 8 η^2 (-400 + 5 ηt (-17 + Φ2) - 26 Φ2) - 60 η^3 (-27 + 10 ηt +
            Φ2) + 15 ηt (-3 + 2 Φ2) + 24 η (ηt (5 + Φ2) - 3 × (18 + Φ2)))) +
η^2 θp (120 η^7 - 12 η^6 (-25 + 10 ηt + Φ2) + 2 ηt (-49 + 20 Φ2) -
    4 η^5 (418 - 2 ηt (-5 + Φ2) + 8 Φ2 - θl (65 + Φ2) + ηt θl (65 + Φ2)) +
    η (θl (98 + 81 Φ1 + 9 Φ2 - 20 Φ2^2) -
        ηt (-82 + 20 Φ2 + θl (98 + 81 Φ1 + 9 Φ2 - 20 Φ2^2))) +
    η^3 (8 × (73 + 2 Φ2) - θl (206 + 117 Φ1 + 33 Φ2 - 20 Φ2^2) +
        12 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + ηt (-514 + 44 Φ2 +
            θl (206 + 117 Φ1 + 33 Φ2 - 20 Φ2^2) - 12 θl^2 (8 - 4 Φ2 + 5 Φ2^2))) +
    4 η^4 (329 + 16 Φ2 - θl (228 + 16 Φ2 + 5 Φ2^2) + ηt (125 - Φ2 +
            θl (228 + 16 Φ2 + 5 Φ2^2))) - 2 η^2 (-2 × (-9 × (18 + Φ2) +
            3 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (142 + 9 Φ1 + 33 Φ2 + 5 Φ2^2)) +
        ηt (-95 + 34 Φ2 + 6 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + 2 θl
              (142 + 9 Φ1 + 33 Φ2 + 5 Φ2^2)))) + x^2 (-1 + η)^2 (1200 η^7 θp -
    120 η^6 θp (-13 + 10 ηt + Φ2) + 20 ηt θp (-7 + 2 Φ2) - 8 η^5 θp
      (1670 + 28 Φ2 - 5 θl (53 + Φ2) + 5 ηt (-2 × (7 + Φ2) + θl (53 + Φ2))) +
    η^3 (-120 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
        2 θp (568 - 16 Φ2 + ηt (-1481 + 58 Φ2)) + (-1 + ηt) θl
          (-372 + 180 Φ2 + θp (-658 + 819 Φ1 - 141 Φ2 - 200 Φ2^2))) +
    η (2 ηt θp (-61 + 50 Φ2) - (-1 + ηt) θl (-230 + 80 Φ2 +
            θp (370 + 297 Φ1 + 65 Φ2 - 60 Φ2^2))) +
    8 η^4 θp (1669 + 74 Φ2 - θl (1050 + 86 Φ2 + 25 Φ2^2) +
        ηt (355 - 11 Φ2 + θl (1050 + 86 Φ2 + 25 Φ2^2))) -
    2 η^2 (36 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 4 θp
          (27 × (18 + Φ2) + ηt (-128 + 31 Φ2)) + (-1 + ηt) θl
          (-71 + 50 Φ2 + θp (1858 + 261 Φ1 + 413 Φ2 + 30 Φ2^2)))) - x
  (-1 + η) η (600 η^7 θp - 60 η^6 θp (-19 + 10 ηt + Φ2) + 2 ηt θp
      (-137 + 40 Φ2) - 4 η^5 θp (1880 + 34 Φ2 - 5 θl (59 + Φ2) +
        5 ηt (-2 × (1 + Φ2) + θl (59 + Φ2))) + η^3 (-60 × (-1 + ηt) θl^2 θp
          (8 - 4 Φ2 + 5 Φ2^2) + 2 θp (872 + 16 Φ2 + ηt (-1033 + 62 Φ2)) +
        (-1 + ηt) θl (-72 + 60 Φ2 + θp (370 + 513 Φ1 + 57 Φ2 - 100 Φ2^2))) +
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        η (2 ηt θp (61 + 10 Φ2) - 2 × (-1 + ηt) θl (-29 + 20 Φ2 +
              θp (166 + 135 Φ1 + 23 Φ2 - 30 Φ2^2))) +
        4 η^4 θp (1657 + 77 Φ2 - θl (1095 + 83 Φ2 + 25 Φ2^2) +
            ηt (490 - 8 Φ2 + θl (1095 + 83 Φ2 + 25 Φ2^2))) -
        η^2 (48 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 2 θp
              (72 × (18 + Φ2) + ηt (-409 + 116 Φ2)) + (-1 + ηt) θl
              (-14 + 20 Φ2 + θp (2374 + 243 Φ1 + 539 Φ2 + 60 Φ2^2)))) +
w^4 (-1 + η)^4 (12 x^5 (-1 + η)^5 (-1 + ηt) θl θp (2 × (-4 + Φ2) +
        θl (8 - 4 Φ2 + 5 Φ2^2)) - 2 x^4 (-1 + η)^4
      (6 × (3 + 5 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) - 6 (-1 + η)^2
          θp (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) -
        (-1 + ηt) θl (68 - 20 Φ2 - θp (248 + 54 Φ1 + 98 Φ2 + 5 Φ2^2) +
            η (-68 + 20 Φ2 + θp (632 + 54 Φ1 + 2 Φ2 + 5 Φ2^2)))) + 3 x^2 (-1 + η)^2
      (240 η^6 θp - 24 η^5 θp (10 ηt + Φ2) + 2 ηt θp (-31 + 10 Φ2) + 12
          η^4 θp (-153 + (-7 + 2 ηt) Φ2) - 2 η (θp (296 + 27 ηt + 16 Φ2 - 4 ηt Φ2) +
            6 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt) θl
              (-41 + 20 Φ2 + θp (320 + 54 Φ1 + 54 Φ2 - 5 Φ2^2))) +
        η^3 (2 θp (1060 + 271 ηt + 104 Φ2) - 40 × (-1 + ηt) θl^2 θp
              (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt) θl (-96 + 189 θp Φ1 + 40 Φ2 +
                5 θp (342 + 29 Φ2 + 4 Φ2^2))) - η^2 (72 × (-1 + ηt) θl^2 θp
              (8 - 4 Φ2 + 5 Φ2^2) + 2 θp (34 × (-1 + Φ2) + ηt (93 + 26 Φ2)) +
            (-1 + ηt) θl (-14 + 3 θp (26 + 27 Φ1 + 95 Φ2 + 10 Φ2^2)))) + η^2 θp
      (120 η^6 + 12 η^4 (-79 + ηt (-5 + Φ2) - 4 Φ2) - 12 η^5 (-5 + 10 ηt + Φ2) +
        12 ηt (-12 + 5 Φ2) - 2 η (8 × (37 + 2 Φ2) - θl (320 + 54 Φ1 +
              54 Φ2 - 5 Φ2^2) - 6 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + ηt (-75 + 36 Φ2 +
              θl (320 + 54 Φ1 + 54 Φ2 - 5 Φ2^2) + 6 θl^2 (8 - 4 Φ2 + 5 Φ2^2))) +
        η^3 (644 + 100 Φ2 + 12 θl^2 (8 - 4 Φ2 + 5 Φ2^2) - θl (702 +
              81 Φ1 + 77 Φ2 + 10 Φ2^2) + ηt (6 × (57 + 4 Φ2) -
              12 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (702 + 81 Φ1 + 77 Φ2 + 10 Φ2^2))) -
        η^2 (-716 + 8 Φ2 + θl (418 + 27 Φ1 - 89 Φ2 - 20 Φ2^2) - 36 θl^2
            (8 - 4 Φ2 + 5 Φ2^2) + ηt (24 × (7 + Φ2) + 36 θl^2 (8 - 4 Φ2 + 5 Φ2^2) +
              θl (-418 - 27 Φ1 + 89 Φ2 + 20 Φ2^2)))) + x^3 (-1 + η)^3
      (12 × (1 + 12 η + 10 η^2) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) -
        4 (-1 + η)^2 θp (-148 + 120 η^3 - 45 ηt - 8 Φ2 + 12 ηt Φ2 +
            6 η ηt (-35 + 2 Φ2) - 6 η^2 (-35 + 20 ηt + 2 Φ2) - 9 η (67 + 7 Φ2)) -
        (-1 + ηt) θl (-2 × (-72 + 30 Φ2 + θp (320 + 54 Φ1 + 54 Φ2 - 5 Φ2^2)) +
            η^2 (6 × (-61 + 20 Φ2) + θp (3918 + 405 Φ1 + 233 Φ2 + 40 Φ2^2)) -
            η (-222 + 60 Φ2 + θp (1070 + 297 Φ1 + 677 Φ2 + 50 Φ2^2)))) - x
      (-1 + η) η (480 η^6 θp - 24 η^5 θp (-5 + 20 ηt + 2 Φ2) + 6 ηt θp
          (-61 + 20 Φ2) + 12 η^4 θp (-311 - 15 Φ2 + 2 ηt (-5 + 2 Φ2)) -
        6 η (6 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
            8 θp (37 + 2 Φ2 + ηt (-5 + 2 Φ2)) + (-1 + ηt) θl (-11 + 10 Φ2 +
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θp (320 + 54 Φ1 + 54 Φ2 - 5 Φ2^2))) + η^3 (-60 × (-1 + ηt) θl^2 θp
(8 - 4 Φ2 + 5 Φ2^2) + 12 θp (284 + 34 Φ2 + ηt (99 + 4 Φ2)) +
(-1 + ηt) θl (-58 + 40 Φ2 + θp (3082 + 351 Φ1 + 307 Φ2 + 40 Φ2^2))) -
η^2 (144 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 6 θp
(-250 + 14 Φ2 + ηt (77 + 20 Φ2)) + (-1 + ηt) θl
(8 - 20 Φ2 + θp (-758 + 27 Φ1 + 463 Φ2 + 70 Φ2^2)))))) +
w^3 (-1 + η)^3 (4 x^6 (-1 + η)^6 (-1 + ηt) θl θp (2 × (-4 + Φ2) +
θl (8 - 4 Φ2 + 5 Φ2^2)) - 4 x^5 (-1 + η)^5
(3 × (3 + 2 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) - 3 (-1 + η)^2
θp (-54 + 10 η^2 + ηt (-15 + Φ2) - 5 Φ2 - η (-15 + 10 ηt + Φ2)) -
(-1 + ηt) θl (-5 × (-2 + Φ2) + 5 η (-2 + Φ2) + η θp
(220 + 12 Φ1 + 12 Φ2 + 5 Φ2^2) - θp (100 + 12 Φ1 + 42 Φ2 + 5 Φ2^2))) +
η^2 θp (-120 η^7 - 12 η^5 (-79 + ηt (-25 + Φ2) - 6 Φ2) + 12 ηt
(12 - 5 Φ2) + 12 η^6 (-25 + 10 ηt + Φ2) +
2 η (-2 × (-3 × (18 + Φ2) + θl (82 + 27 Φ1 + 15 Φ2 - 5 Φ2^2) +
θl^2 (8 - 4 Φ2 + 5 Φ2^2)) + ηt (-7 - 2 Φ2 + 2 θl
(82 + 27 Φ1 + 15 Φ2 - 5 Φ2^2) + 2 θl^2 (8 - 4 Φ2 + 5 Φ2^2))) +
2 η^3 (-2 × (857 + 25 Φ2 - θl (538 + 51 Φ1 + 21 Φ2 - 5 Φ2^2) +
9 θl^2 (8 - 4 Φ2 + 5 Φ2^2)) + ηt (169 - 24 Φ2 -
2 θl (538 + 51 Φ1 + 21 Φ2 - 5 Φ2^2) + 18 θl^2 (8 - 4 Φ2 + 5 Φ2^2))) +
η^4 (1300 - 76 Φ2 - 4 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (258 + 39 Φ1 +
75 Φ2 + 20 Φ2^2) + ηt (-722 - 20 Φ2 + 4 θl^2 (8 - 4 Φ2 + 5 Φ2^2) -
θl (258 + 39 Φ1 + 75 Φ2 + 20 Φ2^2))) + η^2 (1384 + 80 Φ2 -
36 θl^2 (8 - 4 Φ2 + 5 Φ2^2) - θl (1442 + 135 Φ1 + 259 Φ2 + 20 Φ2^2) +
ηt (2 × (-83 + 72 Φ2) + 36 θl^2 (8 - 4 Φ2 + 5 Φ2^2) +
θl (1442 + 135 Φ1 + 259 Φ2 + 20 Φ2^2)))) + x (-1 + η)
η (600 η^7 θp + 12 η^5 θp (-400 + 5 ηt (-19 + Φ2) - 27 Φ2) -
60 η^6 θp (-19 + 10 ηt + Φ2) + 6 ηt θp (-61 + 20 Φ2) +
η^3 (-180 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) +
4 θp (3270 + 84 Φ2 + ηt (-399 + 20 Φ2)) + (-1 + ηt) θl
(50 × (-3 + 2 Φ2) + θp (8250 + 843 Φ1 + 223 Φ2 - 100 Φ2^2))) -
6 η (2 θp (54 + 27 ηt + 3 Φ2 - 11 ηt Φ2) + 2 × (-1 + ηt)
θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt) θl
(-11 + 10 Φ2 + 2 θp (82 + 27 Φ1 + 15 Φ2 - 5 Φ2^2))) -
η^2 (144 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 2 θp
(2964 + 168 Φ2 + ηt (-423 + 224 Φ2)) + 3 × (-1 + ηt) θl
(4 × (-9 + 5 Φ2) + θp (2074 + 243 Φ1 + 383 Φ2 + 20 Φ2^2))) -
2 η^4 (-2 θp (-861 + 795 ηt + 105 Φ2 + 14 ηt Φ2) + 12 ×
(-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) - (-1 + ηt) θl
(2 × (-6 + 5 Φ2) + θp (918 + 105 Φ1 + 193 Φ2 + 50 Φ2^2)))) - x^2
(-1 + η)^2 (1200 η^7 θp - 120 η^6 θp (-13 + 10 ηt + Φ2) + 6 ηt θp
(-31 + 10 Φ2) + 24 η^5 θp (5 ηt (-13 + Φ2) - 8 × (50 + 3 Φ2)) +
η^3 (-360 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) -
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        6 θp (-3004 - 58 Φ2 + ηt (445 + 6 Φ2)) + (-1 + ηt) θl
          (-716 + 280 Φ2 + θp (11438 + 1257 Φ1 - 3 Φ2 - 200 Φ2^2))) -
    6 η (3 θp (36 + 45 ηt + 2 Φ2 - 14 ηt Φ2) + 2 × (-1 + ηt)
        θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt) θl
        (-41 + 20 Φ2 + 2 θp (82 + 27 Φ1 + 15 Φ2 - 5 Φ2^2))) -
    3 η^2 (72 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + 2 θp
        (1580 + 88 Φ2 + ηt (-157 + 70 Φ2)) + (-1 + ηt) θl
        (-206 + 80 Φ2 + θp (3338 + 459 Φ1 + 631 Φ2 + 20 Φ2^2))) -
    4 η^4 (15 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) - 3 θp
        (-88 + 76 Φ2 + ηt (457 + 2 Φ2)) - (-1 + ηt) θl
        (-37 + 20 Φ2 + θp (1186 + 111 Φ1 + 195 Φ2 + 50 Φ2^2)))) + x^4
  (-1 + η)^4 (12 × (3 + 15 η + 5 η^2) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) -
    2 (-1 + η)^2 θp (-888 + 300 η^3 - 75 ηt + 6 η (-225 + 5 ηt (-21 + Φ2) -
          28 Φ2) - 48 Φ2 + 22 ηt Φ2 - 30 η^2 (-21 + 10 ηt + Φ2)) -
    (-1 + ηt) θl (-12 × (-34 + 10 Φ2 + θp (158 + 27 Φ1 + 31 Φ2)) +
        η (-228 + 40 Φ2 + θp (594 + 87 Φ1 - 533 Φ2 - 100 Φ2^2)) +
        η^2 (20 × (-9 + 4 Φ2) + θp (3510 + 237 Φ1 + 353 Φ2 + 100 Φ2^2)))) -
  x^3 (-1 + η)^3 (4 × (1 + 36 η + 90 η^2 + 20 η^3) × (-1 + ηt) θl^2
      θp (8 - 4 Φ2 + 5 Φ2^2) - 4 (-1 + η)^2 θp
      (300 η^4 + 6 η^2 (-175 + 5 ηt (-27 + Φ2) - 31 Φ2) -
        3 × (18 + Φ2) - 30 η^3 (-27 + 10 ηt + Φ2) + ηt (-100 + 31 Φ2) +
        η (-1786 - 181 ηt - 98 Φ2 + 44 ηt Φ2)) - (-1 + ηt) θl
      (η^2 (-834 + 240 Φ2 + θp (6334 + 753 Φ1 - 507 Φ2 - 200 Φ2^2)) -
        4 × (-36 + 15 Φ2 + θp (82 + 27 Φ1 + 15 Φ2 - 5 Φ2^2)) -
        η (-954 + 300 Φ2 + θp (7130 + 1107 Φ1 + 1375 Φ2 + 20 Φ2^2)) +
        2 η^3 (-132 + 60 Φ2 + θp (2914 + 231 Φ1 + 383 Φ2 + 100 Φ2^2)))) -
w^2 (-1 + η)^2 (-6 x^5 (-1 + η)^5 (6 × (1 + 2 η) × (-1 + ηt) θl^2 θp (8 - 4 Φ2 +
        5 Φ2^2) - 2 (-1 + η)^2 θp (20 η^3 + η (-63 + 2 ηt (-30 + Φ2) - 13 Φ2) +
        2 × (-74 + ηt (-5 + Φ2) - 4 Φ2) - 2 η^2 (-30 + 10 ηt + Φ2)) -
    (-1 + ηt) θl (-10 × (-2 + Φ2) + 10 η (-2 + Φ2) + η θp
          (266 + 24 Φ1 - 18 Φ2 - 5 Φ2^2) + 2 η^2 θp (73 + 15 Φ2 + 5 Φ2^2) -
        θp (268 + 24 Φ1 + 48 Φ2 + 5 Φ2^2))) - 2 x^6 (-1 + η)^6 θp
  (-108 + 20 η^4 + 60 θl + 48 θl^2 - 10 Φ2 + 28 θl Φ2 - 24 θl^2 Φ2 + 5 θl Φ2^2 +
    30 θl^2 Φ2^2 - 2 η^3 (5 + 10 ηt + Φ2) + 2 η^2 (-74 - 3 Φ2 + ηt (5 + Φ2)) -
    ηt (30 - 2 Φ2 + 6 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + θl (60 + 28 Φ2 + 5 Φ2^2)) +
    η (6 × (41 + 3 Φ2) - θl (108 + 16 Φ2 + 5 Φ2^2) +
        ηt (40 - 4 Φ2 + θl (108 + 16 Φ2 + 5 Φ2^2)))) + η^2
  θp (-40 η^8 + 4 ηt (12 - 5 Φ2) + 4 η^7 (-85 + 10 ηt + Φ2) +
    η^6 (116 - 4 ηt (-85 + Φ2) + 48 Φ2) + 2 η (-θl (24 + 18 Φ1 + 2 Φ2 - 5 Φ2^2) +
        ηt (99 - 40 Φ2 + θl (24 + 18 Φ1 + 2 Φ2 - 5 Φ2^2))) +
    η^2 (36 × (18 + Φ2) - θl (798 + 207 Φ1 + 167 Φ2 - 20 Φ2^2) -
        12 θl^2 (8 - 4 Φ2 + 5 Φ2^2) + ηt (-486 + 148 Φ2 + θl
            (798 + 207 Φ1 + 167 Φ2 - 20 Φ2^2) + 12 θl^2 (8 - 4 Φ2 + 5 Φ2^2))) -
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$$
\begin{aligned}
&2\,\eta^5\,\Big(-6\times(237+\Phi 2)+\theta l\,\big(162-10\,\Phi 2-5\,\Phi 2^2\big)+\eta t\\
&\quad\big(220+8\,\Phi 2+\theta l\,\big(-162+10\,\Phi 2+5\,\Phi 2^2\big)\big)\Big)+6\,\eta^3\,\Big(100+8\,\Phi 2+\\
&\quad\theta l\,\big(-120+21\,\Phi 1-21\,\Phi 2-10\,\Phi 2^2\big)-6\,\theta l^2\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+\eta t\\
&\quad\big(91+6\,\theta l^2\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+\theta l\,\big(120-21\,\Phi 1+21\,\Phi 2+10\,\Phi 2^2\big)\big)\Big)+\\
&\eta^4\,\Big(-4\times(957+37\,\Phi 2)-12\,\theta l^2\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+\theta l\,\big(2370+117\,\Phi 1+\\
&\quad 157\,\Phi 2+20\,\Phi 2^2\big)+\eta t\,\big(-246-28\,\Phi 2+12\,\theta l^2\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)-\\
&\quad\theta l\,\big(2370+117\,\Phi 1+157\,\Phi 2+20\,\Phi 2^2\big)\big)\Big)\Big)+3\,x^4\,(-1+\eta)^4\\
&\Big(4\times\big(1+15\,\eta+15\,\eta^2\big)\times(-1+\eta t)\,\theta l^2\,\theta p\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)-\\
&\quad 2\,(-1+\eta)^2\,\theta p\,\Big(100\,\eta^4+10\,\eta^2\,(-3+\eta t\,(-45+\Phi 2)-8\,\Phi 2)-\\
&\quad 6\times(18+\Phi 2)-10\,\eta^3\,(-45+10\,\eta t+\Phi 2)+\eta t\,(-5+12\,\Phi 2)+\\
&\quad 4\,\eta\,(5\,\eta t\,(-7+\Phi 2)-3\times(125+7\,\Phi 2))\Big)-\\
&\quad(-1+\eta t)\,\theta l\,\Big(10\,\eta^3\,\theta p\,\big(34+14\,\Phi 2+5\,\Phi 2^2\big)+\eta^2\\
&\quad(20\times(-9+4\,\Phi 2)+\theta p\,(3330+237\,\Phi 1+101\,\Phi 2))-\\
&\quad 2\times\big(-68+20\,\Phi 2+\theta p\,\big(160+54\,\Phi 1+38\,\Phi 2-5\,\Phi 2^2\big)\big)-\\
&\quad\eta\,\big(-44+40\,\Phi 2+\theta p\,\big(2358+129\,\Phi 1+413\,\Phi 2+60\,\Phi 2^2\big)\big)\Big)\Big)+x\\
&(-1+\eta)\,\eta\,\Big(240\,\eta^8\,\theta p+12\,\eta^6\,\theta p\,(-103+2\,\eta t\,(-70+\Phi 2)-21\,\Phi 2)-\\
&\quad 24\,\eta^7\,\theta p\,(-70+10\,\eta t+\Phi 2)+2\,\eta t\,\theta p\,(-61+20\,\Phi 2)+\\
&\quad 12\,\eta^5\,\theta p\,\big(-1074+6\,\eta t\,(35+\Phi 2)+\theta l\,\big(107-11\,\Phi 2-5\,\Phi 2^2\big)+\\
&\quad\eta t\,\theta l\,\big(-107+11\,\Phi 2+5\,\Phi 2^2\big)\big)-\\
&\quad\eta^2\,\Big(48\times(-1+\eta t)\,\theta l^2\,\theta p\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+2\,\theta p\\
&\quad(72\times(18+\Phi 2)+\eta t\,(-905+196\,\Phi 2))+(-1+\eta t)\,\theta l\\
&\quad\big(4\times(-38+25\,\Phi 2)+\theta p\,\big(3354+945\,\Phi 1+729\,\Phi 2-90\,\Phi 2^2\big)\big)\Big)-\\
&\quad 2\,\eta\,\Big(4\,\eta t\,\theta p\,(109-35\,\Phi 2)+(-1+\eta t)\,\theta l\,\big(-11+10\,\Phi 2+\\
&\quad 3\,\theta p\,\big(24+18\,\Phi 1+2\,\Phi 2-5\,\Phi 2^2\big)\big)\Big)-6\,\eta^4\,\Big(12\times(-1+\eta t)\,\theta l^2\,\theta p\\
&\quad\big(8-4\,\Phi 2+5\,\Phi 2^2\big)-2\,\theta p\,(1581+59\,\Phi 2+\eta t\,(55+6\,\Phi 2))-(-1+\eta t)\\
&\quad\theta l\,\big(2\times(-6+5\,\Phi 2)+\theta p\,\big(1932+105\,\Phi 1+127\,\Phi 2+15\,\Phi 2^2\big)\big)\Big)-\\
&\quad 3\,\eta^3\,\Big(60\times(-1+\eta t)\,\theta l^2\,\theta p\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+4\,\theta p\\
&\quad(348+24\,\Phi 2+\eta t\,(173+8\,\Phi 2))+(-1+\eta t)\,\theta l\,\big(34-20\,\Phi 2+\\
&\quad\theta p\,\big(1470-141\,\Phi 1+251\,\Phi 2+90\,\Phi 2^2\big)\big)\Big)\Big)-x^3\,(-1+\eta)^3\\
&\Big(24\,\eta\,\big(2+15\,\eta+10\,\eta^2\big)\times(-1+\eta t)\,\theta l^2\,\theta p\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)-\\
&\quad 4\,(-1+\eta)^2\,\theta p\,\Big(200\,\eta^5+12\,\eta^2\,(-380+5\,\eta t\,(-9+\Phi 2)-22\,\Phi 2)+\\
&\quad 10\,\eta^3\,(63+2\,\eta t\,(-60+\Phi 2)-19\,\Phi 2)-20\,\eta^4\,(-60+10\,\eta t+\Phi 2)+\\
&\quad 15\,\eta t\,(-7+2\,\Phi 2)+9\,\eta\,(-4\times(18+\Phi 2)+\eta t\,(-7+8\,\Phi 2))\Big)-\\
&\quad(-1+\eta t)\,\theta l\,\Big(48-20\,\Phi 2-2\,\theta p\,\big(24+18\,\Phi 1+2\,\Phi 2-5\,\Phi 2^2\big)+\\
&\quad 40\,\eta^4\,\theta p\,\big(-9+13\,\Phi 2+5\,\Phi 2^2\big)-\\
&\quad\eta\,\big(-1050+340\,\Phi 2+\theta p\,\big(3678+1179\,\Phi 1+851\,\Phi 2-110\,\Phi 2^2\big)\big)+\\
&\quad 2\,\eta^3\,\big(36\times(-11+5\,\Phi 2)+\theta p\,\big(10\,782+693\,\Phi 1+577\,\Phi 2+50\,\Phi 2^2\big)\big)-\\
&\quad 3\,\eta^2\,\big(102+\theta p\,\big(4098+57\,\Phi 1+705\,\Phi 2+140\,\Phi 2^2\big)\big)\Big)\Big)-x^2\\
&(-1+\eta)^2\,\Big(600\,\eta^8\,\theta p+60\,\eta^6\,\theta p\,(-68+\eta t\,(-55+\Phi 2)-9\,\Phi 2)-\\
&\quad 60\,\eta^7\,\theta p\,(-55+10\,\eta t+\Phi 2)+2\,\eta t\,\theta p\,(-31+10\,\Phi 2)-\\
&\quad\eta^2\,\Big(72\times(-1+\eta t)\,\theta l^2\,\theta p\,\big(8-4\,\Phi 2+5\,\Phi 2^2\big)+\\
&\quad 2\,\theta p\,(108\times(18+\Phi 2)+\eta t\,(-977+134\,\Phi 2))+(-1+\eta t)\,\theta l\\
&\quad\big(-782+320\,\Phi 2+3\,\theta p\,\big(1758+531\,\Phi 1+395\,\Phi 2-50\,\Phi 2^2\big)\big)-
\end{aligned}
$$

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                2 η (ηt θp (559 - 160 Φ2) + (-1 + ηt) θl (-41 + 20 Φ2 +
                      3 θp (24 + 18 Φ1 + 2 Φ2 - 5 Φ2^2))) +
                6 η^5 θp (26 × (-145 + Φ2) - 5 θl (-56 + 12 Φ2 + 5 Φ2^2) +
                    5 ηt (4 × (48 + Φ2) + θl (-56 + 12 Φ2 + 5 Φ2^2))) -
                6 η^4 (30 × (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) - 2 θp
                      (3116 + 111 Φ2 + ηt (26 + Φ2)) - (-1 + ηt) θl
                      (-74 + 40 Φ2 + θp (3752 + 222 Φ1 + 234 Φ2 + 25 Φ2^2))) -
                3 η^3 (2 θp (1784 + 491 ηt + 112 Φ2 + 44 ηt Φ2) + 120 ×
                      (-1 + ηt) θl^2 θp (8 - 4 Φ2 + 5 Φ2^2) + (-1 + ηt) θl
                      (140 - 40 Φ2 + θp (3506 - 123 Φ1 + 597 Φ2 + 160 Φ2^2)))))))) -
2 cσ^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)
 (-1 +
   η) × (2
    x^6
    (-1 + η)^6
    θp
    (-2 + 2 θl + 9 μ1 + 15 w μ1 +
      4 w^2 μ1 - 13 θl μ1 - 27 w θl μ1 -
      12 w^2 θl μ1 + 5 μ1^2 + 9 w μ1^2 +
      4 w^2 μ1^2 - 9 θl μ1^2 - 21 w θl μ1^2 -
      12 w^2 θl μ1^2 + w^2 η^5 (1 + μ1) -
      w η^4 (3 + w (4 + ηt - 4 μ1)) × (1 + μ1) -
      ηt (2 + 10 θl + 2 μ1 - 9 θl μ1 + 5 θl μ1^2 + 3 w (1 + μ1) + w^2
            (1 + 2 θl (-2 + μ1)^2 + μ1) + w θl (16 - 19 μ1 + 7 μ1^2)) +
      η^3 (2 × (1 + μ1) + 3 w (3 + ηt - 2 μ1 + ηt μ1 - 3 μ1^2) + 2 w^2
            (3 - 5 μ1 - 8 μ1^2 + 2 ηt (1 + μ1) + θl (4 + 2 μ1 + 7 μ1^2))) +
      η (6 + 6 θl - 16 μ1 + 7 θl μ1 - 10 μ1^2 + 13 θl μ1^2 + 4 ηt (1 + μ1) + ηt
            θl (2 - 3 μ1 + μ1^2) + w (3 - 42 μ1 - 27 μ1^2 + 9 ηt (1 + μ1) +
              8 ηt θl (2 - 3 μ1 + μ1^2) + 8 θl (2 + 5 μ1 + 6 μ1^2)) + w^2 (1 - 15 μ1 -
              16 μ1^2 + 4 ηt (1 + θl (-2 + μ1)^2 + μ1) + θl (8 + 28 μ1 + 38 μ1^2))) -
      η^2 (6 - 5 μ1 - 5 μ1^2 + 2 ηt (1 + μ1) + 2 w^2 (2 + ηt θl (-2 + μ1)^2 - 10 μ1 -
              12 μ1^2 + 3 ηt (1 + μ1) + 2 θl (4 + 5 μ1 + 10 μ1^2)) + w (9 + 16 θl - 36 μ1 +
              13 θl μ1 - 27 μ1^2 + 27 θl μ1^2 + ηt (9 + 9 μ1 - 5 θl μ1 + θl μ1^2)))) +
   θp (w^4 (-1 + η)^4 (2 η^7 (1 + μ1) - 2 η ηt (5 + 10 μ1 - μ1^2 + 2 θl (5 - 2 μ1 + 11 μ1^2)) -
          2 η^6 (ηt (1 + μ1) - 2 μ1 (2 + 2 μ1 - 3 μ2)) + 5 ηt (1 + μ1) μ2 + 2 η^5
            (3 - μ1^2 + 2 θl (4 + 2 μ1 + 7 μ1^2) + 11 μ2 + μ1 (2 - μ2 + 6 ηt μ2)) + 2 η^3
            (-4 - 3 μ1 + μ1^2 - 11 μ2 - 23 μ1 μ2 + θl (28 - 4 μ1 - 14 μ1^2 + 72 μ1 μ2) +
              ηt (5 + 10 μ1 - 25 μ1^2 - 6 μ1 μ2 + θl (-26 - 4 μ1 + 22 μ1^2 - 72 μ1 μ2))) +
          2 η^2 (5 + 8 μ1 + 3 μ1^2 - 2 θl (-5 + 7 μ1^2 + μ1 (2 - 18 μ2)) +
              11 μ2 + 5 μ1 μ2 + ηt (4 + 11 μ1^2 - 5 μ2 + μ1 (9 + μ2) -
                2 θl (14 + 11 μ1^2 + 2 μ1 (-1 + 9 μ2)))) + η^4
            (2 × (-5 - 12 μ1 - 7 μ1^2 - 11 μ2 + 25 μ1 μ2 + 2 θl (13 + 2 μ1 +
                  7 μ1^2 + 18 μ1 μ2)) + ηt (-6 - 16 μ1 + 26 μ1^2 +
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            5 μ2 - 7 μ1 μ2 + 4 θl (-4 + 11 μ1^2 - 2 μ1 (1 + 9 μ2))))) -
w^3 (-1 + η)^3 (4 η^8 (1 + μ1) + η^7 (6 + 16 μ1^2 - 4 ηt (1 + μ1) +
        μ1 (22 - 24 μ2)) + 15 ηt (1 + μ1) μ2 - η ηt
      (-8 μ1^2 + 12 θl (5 - 2 μ1 + 11 μ1^2) + μ1 (68 - 19 μ2) + 5 × (8 + μ2)) + 2
      η^6 (6 + 19 μ1 + 7 μ1^2 + 4 θl (4 + 2 μ1 + 7 μ1^2) +
        22 μ2 - 20 μ1 μ2 + 3 ηt (-1 + μ1 (-1 + 4 μ2))) + η^4
      (-4 × (14 + 6 μ1^2 + μ1 (26 - 27 μ2) + 30 μ2) +
        θl (196 + 4 μ1^2 + 5 Φ1 + μ1 (-16 + 11 Φ1 + 5 μ2 (64 + Φ1 - Φ2) - 11 Φ2) +
            μ2 (8 + 5 Φ1 - 5 Φ2) - 5 Φ2) + ηt (-8 - 16 μ1 + 28 μ1^2 + 19 μ2 -
            53 μ1 μ2 + θl (-116 + 172 μ1^2 - 5 Φ1 - μ1 (16 + 11 Φ1 + 5 μ2
                (64 + Φ1 - Φ2) - 11 Φ2) + 5 Φ2 + μ2 (-8 - 5 Φ1 + 5 Φ2)))) +
    η^3 (2 × (-7 + 10 μ1^2 + μ1 (3 - 58 μ2) - 4 μ2) + ηt (2 × (-54 μ1^2 +
                μ1 (64 - 29 μ2) + 7 × (4 + μ2)) +
            θl (-196 + 80 μ1^2 + 5 Φ1 + μ1 μ2 (-484 + 5 Φ1 - 5 Φ2) +
                μ2 (-4 + 5 Φ1 - 5 Φ2) + 11 μ1 (-4 + Φ1 - Φ2) - 5 Φ2)) +
        θl (172 - 104 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (4 - 5 Φ1 + 5 Φ2) +
            μ1 (-4 - 11 Φ1 + 11 Φ2 + μ2 (484 - 5 Φ1 + 5 Φ2)))) + η^5
      (4 × (2 - 9 μ1^2 + 6 μ2 + μ1 (-7 + 15 μ2)) + θl (116 + 112 μ1^2 +
            5 Φ1 + μ1 (12 + 11 Φ1 + μ2 (52 + 5 Φ1 - 5 Φ2) - 11 Φ2) +
            μ2 (4 + 5 Φ1 - 5 Φ2) - 5 Φ2) + ηt (-12 - 40 μ1 + 20 μ1^2 - 9 μ2 +
            39 μ1 μ2 + θl (-32 + 44 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (-4 - 5 Φ1 + 5 Φ2) +
                μ1 (12 - 11 Φ1 + 11 Φ2 + μ2 (-52 - 5 Φ1 + 5 Φ2))))) +
    η^2 (40 + 10 μ1^2 - 52 θl μ1^2 + 60 μ2 + 2 μ1 (31 + 6 μ2) + 5 θl
          (12 - (1 + μ2) Φ1 + Φ2 + μ2 Φ2) +
        θl μ1 (8 - 11 Φ1 + 11 Φ2 + μ2 (216 - 5 Φ1 + 5 Φ2)) +
        ηt (2 × (7 + 26 μ1^2 - 17 μ2 + μ1 (3 + 7 μ2)) -
            θl (172 + 180 μ1^2 - 5 × (1 + μ2) Φ1 + 5 Φ2 + 5 μ2 Φ2 +
                μ1 (-8 - 11 Φ1 + 11 Φ2 + μ2 (216 - 5 Φ1 + 5 Φ2))))) +
w^2 (-1 + η)^2 (2 η^9 (1 + μ1) + 15 ηt (1 + μ1) μ2 + 2 η^7 (5 + 34 μ1 + 17 μ1^2 +
        2 θl (4 + 2 μ1 + 7 μ1^2) + 6 ηt (-1 + μ1 (-1 + μ2)) + 11 μ2 - 37 μ1 μ2) - 2
      η^8 (-6 + ηt - 10 μ1 + ηt μ1 - 4 μ1^2 + 6 μ1 μ2) - 3 η ηt
      (-4 μ1^2 + 4 θl (5 - 2 μ1 + 11 μ1^2) + μ1 (28 - 19 μ2) + 5 × (4 + μ2)) - η^5
      (26 + 68 μ1^2 + 2 μ1 (71 - 90 μ2) + 72 μ2 -
        θl (μ1 (-20 + 35 Φ1 + μ2 (176 + 15 Φ1 - 15 Φ2) - 31 Φ2) + μ2
            (8 + 15 Φ1 - 15 Φ2) + 3 × (72 + 5 Φ1 - 5 Φ2) + 2 μ1^2 (62 + Φ1 + Φ2)) +
        ηt (36 + 88 μ1 - 44 μ1^2 + 19 μ2 - 29 μ1 μ2 + θl (92 + 15 Φ1 +
                μ1 (-28 + 35 Φ1 + μ2 (176 + 15 Φ1 - 15 Φ2) - 31 Φ2) +
                μ2 (8 + 15 Φ1 - 15 Φ2) - 15 Φ2 + 2 μ1^2 (-60 + Φ1 + Φ2)))) + η^3
      (14 + 72 μ1 + 34 μ1^2 + 66 μ2 - 90 μ1 μ2 + ηt (108 + 200 μ1 - 40 μ1^2 +
            34 μ2 - 98 μ1 μ2 + θl (μ1 (-76 + 35 Φ1 + μ2 (-568 + 15 Φ1 - 15 Φ2) -
                    31 Φ2) + μ2 (-16 + 15 Φ1 - 15 Φ2) + 5 × (-56 + 3 Φ1 - 3 Φ2) +
                2 μ1^2 (-6 + Φ1 + Φ2))) + θl (-2 μ1^2 (64 + Φ1 + Φ2) +
            5 × (40 - 3 Φ1 + 3 Φ2) + μ2 (16 - 15 Φ1 + 15 Φ2) +
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            μ1 (36 - 35 Φ1 + 31 Φ2 + μ2 (568 - 15 Φ1 + 15 Φ2))) + η^4
        (8 × (-10 + μ1^2 - 19 μ2 - 4 μ1 (3 + μ2)) + θl (-4 μ1^2 (22 + Φ1) +
            3 × (84 + 5 × (1 + μ2) Φ1 - 5 × (1 + μ2) Φ2) +
            μ1 (-76 + 17 Φ1 + 15 μ2 Φ1 - 21 Φ2 + 9 μ2 (64 + Φ2))) +
          ηt (6 + 58 μ1 - 56 μ1^2 + 27 μ2 - 93 μ1 μ2 + θl (-196 -
                15 × (1 + μ2) Φ1 + 4 μ1^2 (60 + Φ1) + 15 Φ2 + 15 μ2 Φ2 -
                μ1 (4 + 17 Φ1 + 15 μ2 Φ1 - 21 Φ2 + 9 μ2 (64 + Φ2)))))) +
      η^2 (46 + 58 μ1 + 50 μ2 + 14 μ1 μ2 + θl (74 - 15 Φ1 + μ1^2 (-28 +
                Φ1 - Φ2) + 15 Φ2 + μ2 (14 - 15 Φ1 + 15 Φ2) +
            μ1 (58 - 26 Φ1 + 26 Φ2 + μ2 (182 - 15 Φ1 + 3 Φ2))) -
          ηt (4 + 56 μ1 - 32 μ1^2 + 38 μ2 - 22 μ1 μ2 + θl (μ1^2 (264 + Φ1 - Φ2) +
                15 × (14 - Φ1 + Φ2) + μ2 (14 - 15 Φ1 + 15 Φ2) +
                μ1 (18 - 26 Φ1 + 26 Φ2 + μ2 (182 - 15 Φ1 + 3 Φ2))))) +
      η^6 (22 + 8 × (-2 + ηt) μ1^2 + 86 μ2 - 4 ηt μ2 + 2 μ1 (9 + 7 μ2 +
            4 ηt (-2 + 7 μ2)) + θl (2 × (53 + 5 μ2) + μ1^2 (140 + 3 Φ1 + Φ2) +
            μ1 (42 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)) - ηt (26 + 10 μ2 +
                μ1^2 (3 Φ1 + Φ2) + μ1 (2 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))))) +
  η (4 η^8 (1 + μ1) - 2 η^7 (2 - 5 μ1^2 + 2 ηt (1 + μ1) + 3 μ1 (-3 + 4 μ2)) +
      ηt (2 μ1^2 - 5 × (2 + μ2) + μ1 (-8 + 19 μ2)) - η
        (2 ηt (5 + 8 μ1 + 3 μ1^2) + 5 θl (1 + μ2) × (-2 + Φ1 - Φ2) + θl μ1^2
            (2 - Φ1 + Φ2) + θl μ1 (5 μ2 Φ1 + 4 × (-2 + Φ1 - Φ2) + 7 μ2 (2 + Φ2)) +
          ηt θl (μ1^2 (42 + Φ1 - Φ2) - μ1 (5 μ2 Φ1 + 4 (Φ1 - Φ2) + 7 μ2 (2 + Φ2)) +
            5 × (6 - Φ1 + Φ2 + μ2 (2 - Φ1 + Φ2)))) + η^6
        (2 - 2 μ1^2 + 22 μ2 + 10 μ1 μ2 + 4 ηt μ1 (1 + μ1 + 3 μ2) +
          θl (2 × (6 + μ2) + μ1^2 (28 + Φ1 + Φ2) + μ1 (16 - 10 μ2 + Φ1 + Φ2) -
            ηt (2 × (-2 + μ2) + μ1^2 (Φ1 + Φ2) + μ1 (8 - 10 μ2 + Φ1 + Φ2)))) +
      η^5 (18 - 28 μ1 - 22 μ1^2 - 6 μ2 + 54 μ1 μ2 + θl (38 + 6 μ2 +
            μ1^2 (34 + 3 Φ1 + Φ2) + μ1 (6 μ2 + 9 Φ1 - 5 Φ2 - 12 μ2 Φ2)) -
          ηt (4 × (-2 - 2 μ1 (-2 + μ2) + μ2) + θl (22 + 6 μ2 + μ1^2
                (6 + 3 Φ1 + Φ2) + μ1 (-8 + 6 μ2 + 9 Φ1 - 5 Φ2 - 12 μ2 Φ2)))) +
      η^2 (20 - 4 μ1^2 + 8 μ2 + 4 μ1 (4 + 8 μ2) - θl μ1^2 (4 + Φ1 + Φ2) +
          5 θl (4 - Φ1 + Φ2 + μ2 (2 - Φ1 + Φ2)) +
          θl μ1 (28 - 12 Φ1 + 10 Φ2 + μ2 (22 - 5 Φ1 + 5 Φ2)) +
          ηt (30 + 4 μ1 + 22 μ1^2 + 6 μ2 - 18 μ1 μ2 +
            θl (5 × (-8 + Φ1 + μ2 (-2 + Φ1 - Φ2) - Φ2) + μ1^2 (-40 + Φ1 + Φ2) +
                μ1 (12 Φ1 + μ2 (-22 + 5 Φ1 - 5 Φ2) - 10 × (2 + Φ2)))) +
      η^4 (-26 - 20 μ1 + 6 μ1^2 - 46 μ2 - 10 μ1 μ2 + θl (-16 μ1^2 +
            μ1 (-36 + 11 Φ1 + μ2 (92 + 5 Φ1 - 5 Φ2) - 11 Φ2) +
            μ2 (-4 + 5 Φ1 - 5 Φ2) + 5 × (8 + Φ1 - Φ2)) + ηt (-20 - 16 μ1 + 4 μ1^2 -
            μ2 - 13 μ1 μ2 + θl (-36 + 32 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (4 - 5 Φ1 + 5 Φ2) +
                μ1 (20 - 11 Φ1 + 11 Φ2 + μ2 (-92 - 5 Φ1 + 5 Φ2))))) +
      η^3 (2 × (-7 + 6 μ1^2 + μ1 (5 - 31 μ2) + 11 μ2) + θl (24 + 5 Φ1 -
            4 μ1^2 (6 + Φ1) + μ2 (-8 + 5 Φ1 - 5 Φ2) - 5 Φ2 +
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                μ1 (-5 Φ1 + Φ2 + μ2 (112 + 5 Φ1 + 19 Φ2))) + ηt (6 + 52 μ1 - 26 μ1^2 +
                4 μ2 - 8 μ1 μ2 + θl (4 μ1^2 (10 + Φ1) - 5 × (4 + Φ1 - Φ2) + μ2 (8 - 5 Φ1 +
                      5 Φ2) - μ1 (16 - 5 Φ1 + Φ2 + μ2 (112 + 5 Φ1 + 19 Φ2)))))) -
        w (-1 + η) × (6 η^9 (1 + μ1) + η^8 (8 + 18 μ1^2 - 6 ηt (1 + μ1) + μ1
              (38 - 36 μ2)) + 5 ηt (1 + μ1) μ2 - η ηt
            (40 + 44 μ1 - 8 μ1^2 + 4 θl (5 - 2 μ1 + 11 μ1^2) + 15 μ2 - 57 μ1 μ2) - η^5
            (2 × (19 + 14 μ1^2 + μ1 (57 - 54 μ2) + 60 μ2) - θl (148 + 15 × (1 + μ2) Φ1 +
                μ1 (-68 + 35 Φ1 + 3 μ2 (72 + 5 Φ1 - 5 Φ2) - 31 Φ2) - 15 Φ2 - 15 μ2 Φ2 +
                2 μ1^2 (12 + Φ1 + Φ2)) + ηt (44 + 64 μ1 - 28 μ1^2 + 11 μ2 + 11 μ1 μ2 +
                θl (88 + 15 × (1 + μ2) Φ1 + μ1 (-44 + 35 Φ1 + 3 μ2 (72 + 5 Φ1 - 5 Φ2) -
                      31 Φ2) - 15 Φ2 - 15 μ2 Φ2 + 2 μ1^2 (-54 + Φ1 + Φ2)))) +
          η^7 (40 μ1 + 16 μ1^2 + 44 μ2 - 40 μ1 μ2 + θl (2 × (16 + μ2) + μ1^2
                (56 + Φ1 + Φ2) + μ1 (28 - 10 μ2 + Φ1 + Φ2)) - ηt (8 + 2 θl μ2 + μ1^2
                (-4 + θl (Φ1 + Φ2)) + μ1 (4 - 24 μ2 + θl (12 - 10 μ2 + Φ1 + Φ2)))) +
          η^3 (4 × (8 + 3 μ1^2 + 15 μ2 + μ1 (17 + 3 μ2)) + θl (-μ1^2 (56 + 3 Φ1 + 3 Φ2) +
                3 × (36 - 5 Φ1 + 5 Φ2) + μ2 (22 - 15 Φ1 + 15 Φ2) +
                μ1 (64 - 36 Φ1 - 5 μ2 (-50 + 3 Φ1 - 3 Φ2) + 30 Φ2)) +
            ηt (92 + 96 μ1 + 40 μ1^2 + 26 μ2 - 70 μ1 μ2 + θl (μ1 (-64 + 36 Φ1 +
                      5 μ2 (-50 + 3 Φ1 - 3 Φ2) - 30 Φ2) + μ2 (-22 + 15 Φ1 - 15 Φ2) +
                  15 × (-12 + Φ1 - Φ2) + μ1^2 (-88 + 3 Φ1 + 3 Φ2)))) - η^2
            (4 × (1 + μ1) × (-5 + μ1 - 3 μ2) + ηt (20 + 4 μ1^2 - 10 μ1 (-6 + μ2) +
                14 μ2 - 3 θl (μ2 (-8 + 5 Φ1 - 5 Φ2) + 5 × (-8 + Φ1 - Φ2)) +
                2 θl μ1^2 (85 + Φ1 - Φ2) + θl μ1
                  (14 - 19 Φ1 + 19 Φ2 - 3 μ2 (-8 + 5 Φ1 + 3 Φ2))) + θl
              (3 μ2 (-8 + 5 Φ1 - 5 Φ2) + 5 × (-8 + 3 Φ1 - 3 Φ2) + μ1^2 (6 - 2 Φ1 + 2 Φ2) +
                μ1 (-46 + 19 Φ1 - 19 Φ2 + 3 μ2 (-8 + 5 Φ1 + 3 Φ2))) - 2
            η^6 (2 × (-6 + 11 μ1^2 + μ1 (11 - 24 μ2) - 9 μ2) - θl (54 + 8 μ2 +
                μ1^2 (59 + 3 Φ1 + Φ2) + μ1 (11 + 9 Φ1 - 5 Φ2 - 4 μ2 (1 + 3 Φ2))) +
            ηt (-6 + 14 μ1 - 4 μ1^2 + 4 μ2 - 20 μ1 μ2 + θl (22 + 8 μ2 +
                      μ1^2 (3 + 3 Φ1 + Φ2) - μ1 (5 + 4 μ2 - 9 Φ1 + 5 Φ2 + 12 μ2 Φ2)))) +
            η^4 (2 × (-26 - 5 μ1 + 15 μ1^2 - 16 μ2 - 76 μ1 μ2) + θl (-8 μ1^2
                (11 + Φ1) + μ2 (-16 + 15 Φ1 - 15 Φ2) + 5 × (28 + 3 Φ1 - 3 Φ2) +
                μ1 (-44 + Φ1 - 9 Φ2 + μ2 (440 + 15 Φ1 + 33 Φ2))) +
            ηt (14 - 84 μ1^2 - 55 μ1 (-2 + μ2) + 17 μ2 + θl (-124 - 15 Φ1 +
                      8 μ1^2 (19 + Φ1) + 15 Φ2 + μ2 (16 - 15 Φ1 + 15 Φ2) -
                      μ1 (20 + Φ1 - 9 Φ2 + μ2 (440 + 15 Φ1 + 33 Φ2)))))) +
    x^5 (-1 + η)^5 (4 (-1 + w (-1 + η))^3 (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
        2 (-1 + η)^2 θp (-1 + 8 η - 12 η^2 + 4 ηt + 12 η ηt - 22 μ1 - 58
            η μ1 - 12 η^2 μ1 + 4 ηt μ1 + 12 η ηt μ1 - 9 μ1^2 - 30
            η μ1^2 + 2 w^3 (-1 + η)^3 (1 + μ1) (η - ηt + 4 μ1) - 9
            μ2 - 3 μ1 μ2 + 12 η μ1 μ2 - 6 ηt μ1 μ2 - w^2 (-1 + η)^2
            (5 + 42 μ1 + 25 μ1^2 + 6 η^2 (1 + μ1) + 11 μ2 - 7 μ1 μ2 +
              η (8 + 32 μ1 + 24 μ1^2 - 6 ηt (1 + μ1) - 6 μ1 μ2) +
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        ηt (-8 - 8 μ1 + 6 μ1 μ2)) + 2 w (-1 + η) ×
      (3 + 28 μ1 + 13 μ1^2 + 9 η^2 (1 + μ1) + 10 μ2 - 2 μ1 μ2 + η (5 + 50 μ1 +
            27 μ1^2 - 9 ηt (1 + μ1) - 9 μ1 μ2) + ηt (-5 - 5 μ1 + 6 μ1 μ2))) +
  θl (-4 × (-1 + w (-1 + η)) × (-1 + η) × (-1 + ηt) μ1 (5 + w (-1 + η) ×
          (-5 + μ1) - μ1 - η (1 + μ1)) + θp
      (-18 - 58 η - 72 η^2 + 50 ηt + 122 η ηt - 24 η^2 ηt + 34 μ1 + 132 η μ1 -
        86 η^2 μ1 - 18 ηt μ1 - 100 η ηt μ1 + 38 η^2 ηt μ1 + 40 μ1^2 + 58 η μ1^2 -
        158 η^2 μ1^2 + 16 ηt μ1^2 + 54 η ηt μ1^2 - 10 η^2 ηt μ1^2 - 2 μ2 - 4 η μ2 -
        2 η^2 μ2 + 2 ηt μ2 + 4 η ηt μ2 + 2 η^2 ηt μ2 - 26 μ1 μ2 - 16 η μ1 μ2 +
        10 η^2 μ1 μ2 + 26 ηt μ1 μ2 + 16 η ηt μ1 μ2 - 10 η^2 ηt μ1 μ2 +
        4 w^3 (-1 + η)^3 (5 - 8 μ1 - 13 μ1^2 + 2 η (4 + 2 μ1 + 7 μ1^2) + 2 μ2 +
            8 μ1 μ2 - ηt (13 - 4 μ1 + μ1^2 + 2 μ2 + 8 μ1 μ2)) + 9 μ1 Φ1 -
        8 η μ1 Φ1 - η^2 μ1 Φ1 - 9 ηt μ1 Φ1 + 8 η ηt μ1 Φ1 + η^2 ηt μ1 Φ1 +
        3 μ1^2 Φ1 - 2 η μ1^2 Φ1 - η^2 μ1^2 Φ1 - 3 ηt μ1^2 Φ1 + 2 η ηt μ1^2 Φ1 +
        η^2 ηt μ1^2 Φ1 - 5 μ1 Φ2 + 6 η μ1 Φ2 - η^2 μ1 Φ2 + 5 ηt μ1 Φ2 -
        6 η ηt μ1 Φ2 + η^2 ηt μ1 Φ2 + μ1^2 Φ2 - η^2 μ1^2 Φ2 - ηt μ1^2 Φ2 +
        η^2 ηt μ1^2 Φ2 - 12 μ1 μ2 Φ2 + 12 η μ1 μ2 Φ2 + 12 ηt μ1 μ2 Φ2 -
        12 η ηt μ1 μ2 Φ2 - w^2 (-1 + η)^2 (50 - 106 μ1 - 144 μ1^2 +
            24 η^2 (4 + 2 μ1 + 7 μ1^2) + 14 μ2 + 110 μ1 μ2 - 9 μ1 Φ1 - 3 μ1^2 Φ1 +
            5 μ1 Φ2 - μ1^2 Φ2 + 12 μ1 μ2 Φ2 - η (-1 + ηt) × (2 × (53 + 5 μ2) +
                μ1^2 (20 + 3 Φ1 + Φ2) - μ1 (78 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2))) +
            ηt (-2 × (73 + 7 μ2) + μ1^2 (-24 + 3 Φ1 + Φ2) +
                μ1 (58 + 9 Φ1 - 5 Φ2 - 2 μ2 (55 + 6 Φ2)))) -
        w (-1 + η) (η^2 (2 × (-96 + (-1 + ηt) μ2) - μ1 (158 - 10 μ2 +
                Φ1 + ηt (-62 + 10 μ2 - Φ1 - Φ2) + Φ2) +
                μ1^2 (-326 - Φ1 - Φ2 + ηt (-10 + Φ1 + Φ2))) + η
            (-2 × (54 + 7 μ2) - μ1^2 (-94 + 5 Φ1 + Φ2) + μ1 (250 - 2 μ2 - 17 Φ1 +
                11 Φ2 + 24 μ2 Φ2) + ηt (204 + 14 μ2 + μ1^2 (74 + 5 Φ1 + Φ2) +
                μ1 (-202 + 2 μ2 + 17 Φ1 - 11 Φ2 - 24 μ2 Φ2))) - 2 ×
            (4 × (6 + μ2) - μ1^2 (66 + 3 Φ1 + Φ2) + μ1 (-54 + 52 μ2 - 9 Φ1 + 5
                Φ2 + 12 μ2 Φ2) + ηt (-4 × (18 + μ2) + μ1^2 (-18 + 3 Φ1 + Φ2) +
                μ1 (30 + 9 Φ1 - 5 Φ2 - 4 μ2 (13 + 3 Φ2))))))) + x^2 (-1 + η)^2
(4 (-1 + w (-1 + η))^3 (1 + η) × (-2 η (1 + 2 η) + w (-1 - 2 η + 3 η^2)) ×
    (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
  (-1 + η)^2 θp (60 η + 156 η^2 + 44 η^3 + 20 η^4 + 60 η^5 - 30 ηt - 60 η
      ηt - 24 η^2 ηt - 80 η^3 ηt - 60 η^4 ηt + 48 η μ1 + 252 η^2 μ1 + 464
      η^3 μ1 + 350 η^4 μ1 + 60 η^5 μ1 - 32 ηt μ1 - 148 η ηt μ1 - 120 η^2
      ηt μ1 - 56 η^3 ηt μ1 - 60 η^4 ηt μ1 - 12 η μ1^2 + 24 η^2 μ1^2 + 180
      η^3 μ1^2 + 150 η^4 μ1^2 + 22 ηt μ1^2 + 104 η ηt μ1^2 + 48 η^2 ηt
      μ1^2 + 24 η^3 ηt μ1^2 + 32 η μ2 + 228 η^2 μ2 + 204 η^3 μ2 - 10
      ηt μ2 - 27 η ηt μ2 - 24 η^2 ηt μ2 + 56 η μ1 μ2 + 12 η^2 μ1
      μ2 - 204 η^3 μ1 μ2 - 240 η^4 μ1 μ2 + 38 ηt μ1 μ2 + 117 η ηt
      μ1 μ2 + 192 η^2 ηt μ1 μ2 + 120 η^3 ηt μ1 μ2 + w^4 (-1 + η)^4
      (12 η^3 (1 + μ1) - 12 η^2 (-1 + ηt - 5 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
```

$$
\begin{aligned}
&2 \times \left(5 + 8\,\mu1 + 3\,\mu1^2 + 11\,\mu2 + 5\,\mu1\,\mu2\right) + \\
&\eta t\,\left(-12 - 22\,\mu1 + 38\,\mu1^2 + 5\,\mu2 + 17\,\mu1\,\mu2\right) + \\
&2\,\eta\,\left(16 + 37\,\mu1 + 21\,\mu1^2 + 33\,\mu2 - 27\,\mu1\,\mu2 + 6\,\eta t\,(-1 - \mu1 + 3\,\mu1\,\mu2)\right)\Big) - \\
&w^3\,(-1+\eta)^3\,\Big(40\,\eta^4\,(1+\mu1) + 2 \times \left(20 + 31\,\mu1 + 5\,\mu1^2 + 30\,\mu2 + 6\,\mu1\,\mu2\right) - \\
&4\,\eta^3\,\left(-21 - 61\,\mu1 - 40\,\mu1^2 + 10\,\eta t\,(1+\mu1) + 36\,\mu1\,\mu2\right) + \\
&\eta t\,\left(-66 - 130\,\mu1 + 128\,\mu1^2 + \mu2 + 97\,\mu1\,\mu2\right) + \\
&3\,\eta\,\Big(62 + 40\,\mu1^2 + 36\,\eta t\,\mu1^2 + 2\,\mu1\,(63 - 34\,\mu2) + \\
&\quad 112\,\mu2 - 9\,\eta t\,(4+\mu2) + \eta t\,\mu1\,(-64 + 87\,\mu2)\Big) + 12\,\eta^2 \\
&\quad \left(14 + 43\,\mu1 + 23\,\mu1^2 + 22\,\mu2 - 29\,\mu1\,\mu2 + \eta t\,(-7 - 7\,\mu1 + 12\,\mu1\,\mu2)\right)\Big) + \\
&w^2\,(-1+\eta)^2\,\Big(46 + 58\,\mu1 + 30\,\eta^5\,(1+\mu1) + 50\,\mu2 + 14\,\mu1\,\mu2 + \\
&\eta t\,\left(-124 - 224\,\mu1 + 164\,\mu1^2 - 23\,\mu2 + 181\,\mu1\,\mu2\right) - \\
&10\,\eta^4\,\left(3\,\eta t\,(1+\mu1) - 4 \times \left(4 + 7\,\mu1 + 3\,\mu1^2 - 3\,\mu1\,\mu2\right)\right) + \\
&4\,\eta^3\,\Big(70 + 255\,\mu1 + 125\,\mu1^2 + 55\,\mu2 - 161\,\mu1\,\mu2 + \\
&\quad 10\,\eta t\,(-4 - 4\,\mu1 + 3\,\mu1\,\mu2)\Big) + 12\,\eta^2\,\Big(38 + 106\,\mu1 + 38\,\mu1^2 + \\
&\quad 65\,\mu2 - 61\,\mu1\,\mu2 + \eta t\,\left(-15 - 23\,\mu1 + 4\,\mu1^2 - 2\,\mu2 + 40\,\mu1\,\mu2\right)\Big) + \\
&\eta\,\Big(2 \times \left(155 + 278\,\mu1 + 51\,\mu1^2 + 249\,\mu2 - 69\,\mu1\,\mu2\right) + \\
&\quad 3\,\eta t\,\left(-80 - 164\,\mu1 + 108\,\mu1^2 - 27\,\mu2 + 177\,\mu1\,\mu2\right)\Big)\Big) - w \\
&(-1+\eta) \times \Big(90\,\eta^5\,(1+\mu1) - 4 \times (1+\mu1) \times (-5 + \mu1 - 3\,\mu2) + \\
&10\,\eta^4\,\left(20 + 65\,\mu1 + 27\,\mu1^2 - 9\,\eta t\,(1+\mu1) - 36\,\mu1\,\mu2\right) + \\
&\eta t\,\left(-100 - 148\,\mu1 + 96\,\mu1^2 - 29\,\mu2 + 139\,\mu1\,\mu2\right) + \\
&12\,\eta^2\,\Big(34 + 85\,\mu1 + 21\,\mu1^2 + 62\,\mu2 - 34\,\mu1\,\mu2 + \\
&\quad \eta t\,\left(-11 - 27\,\mu1 + 8\,\mu1^2 - 4\,\mu2 + 44\,\mu1\,\mu2\right)\Big) + 4\,\eta^3\,\Big(63 + 313\,\mu1 + \\
&\quad 130\,\mu1^2 + 106\,\mu2 - 176\,\mu1\,\mu2 + \eta t\,\left(-50 - 44\,\mu1 + 6\,\mu1^2 + 60\,\mu1\,\mu2\right)\Big) + \\
&\eta\,\Big(4 \times \left(54 + 75\,\mu1 + 3\,\mu1^2 + 65\,\mu2 + 17\,\mu1\,\mu2\right) + \eta t \\
&\quad \left(-204 - 460\,\mu1 + 320\,\mu1^2 - 81\,\mu2 + 423\,\mu1\,\mu2\right)\Big)\Big)\Big) + \\
&\theta l\,\Big(-10 - 50\,\eta + 60\,\eta^3 + 10\,\eta t + 50\,\eta\,\eta t - 60\,\eta^3\,\eta t + 10\,\theta p + 80\,\eta \\
&\theta p + 174\,\eta^2\,\theta p + 312\,\eta^3\,\theta p + 400\,\eta^4\,\theta p + 180\,\eta^5\,\theta p - 30 \\
&\eta t\,\theta p - 180\,\eta\,\eta t\,\theta p - 270\,\eta^2\,\eta t\,\theta p - 416\,\eta^3\,\eta t\,\theta p - 320 \\
&\eta^4\,\eta t\,\theta p + 60\,\eta^5\,\eta t\,\theta p - 8\,\mu1 - 56\,\eta\,\mu1 - 100\,\eta^2\,\mu1 + 84 \\
&\eta^3\,\mu1 + 96\,\eta^4\,\mu1 - 16\,\eta^5\,\mu1 + 8\,\eta t\,\mu1 + 56\,\eta\,\eta t\,\mu1 + 100 \\
&\eta^2\,\eta t\,\mu1 - 84\,\eta^3\,\eta t\,\mu1 - 96\,\eta^4\,\eta t\,\mu1 + 16\,\eta^5\,\eta t\,\mu1 + 8\,\theta p \\
&\mu1 + 96\,\eta\,\theta p\,\mu1 + 58\,\eta^2\,\theta p\,\mu1 - 346\,\eta^3\,\theta p\,\mu1 - 138\,\eta^4\,\theta p \\
&\mu1 + 230\,\eta^5\,\theta p\,\mu1 - 56\,\eta\,\eta t\,\theta p\,\mu1 - 106\,\eta^2\,\eta t\,\theta p\,\mu1 + 186 \\
&\eta^3\,\eta t\,\theta p\,\mu1 + 178\,\eta^4\,\eta t\,\theta p\,\mu1 - 110\,\eta^5\,\eta t\,\theta p\,\mu1 + 2\,\mu1^2 - 6 \\
&\eta\,\mu1^2 + 32\,\eta^2\,\mu1^2 - 12\,\eta^3\,\mu1^2 - 16\,\eta^5\,\mu1^2 - 2\,\eta t\,\mu1^2 + 6\,\eta \\
&\eta t\,\mu1^2 - 32\,\eta^2\,\eta t\,\mu1^2 + 12\,\eta^3\,\eta t\,\mu1^2 + 16\,\eta^5\,\eta t\,\mu1^2 - 2\,\theta p \\
&\mu1^2 - 20\,\eta\,\theta p\,\mu1^2 - 152\,\eta^2\,\theta p\,\mu1^2 - 250\,\eta^3\,\theta p\,\mu1^2 + 242\,\eta^4 \\
&\theta p\,\mu1^2 + 410\,\eta^5\,\theta p\,\mu1^2 - 42\,\eta t\,\theta p\,\mu1^2 - 200\,\eta\,\eta t\,\theta p\,\mu1^2 - 16 \\
&\eta^2\,\eta t\,\theta p\,\mu1^2 + 122\,\eta^3\,\eta t\,\theta p\,\mu1^2 - 102\,\eta^4\,\eta t\,\theta p\,\mu1^2 + 10 \\
&\eta^5\,\eta t\,\theta p\,\mu1^2 - 5\,\mu2 - 15\,\eta\,\mu2 + 5\,\eta^2\,\mu2 + 15\,\eta^3\,\mu2 + 5\,\eta t \\
&\mu2 + 15\,\eta\,\eta t\,\mu2 - 5\,\eta^2\,\eta t\,\mu2 - 15\,\eta^3\,\eta t\,\mu2 + 10\,\theta p\,\mu2 + 54\,\eta \\
&\theta p\,\mu2 + 22\,\eta^2\,\theta p\,\mu2 - 10\,\eta^3\,\theta p\,\mu2 + 52\,\eta^4\,\theta p\,\mu2 + 20\,\eta^5\,\theta p \\
&\mu2 - 10\,\eta t\,\theta p\,\mu2 - 54\,\eta\,\eta t\,\theta p\,\mu2 - 22\,\eta^2\,\eta t\,\theta p\,\mu2 + 10\,\eta^3 \\
&\eta t\,\theta p\,\mu2 - 52\,\eta^4\,\eta t\,\theta p\,\mu2 - 20\,\eta^5\,\eta t\,\theta p\,\mu2 + 19\,\mu1\,\mu2 + 57
\end{aligned}
$$

$\eta\,\mu1\,\mu2 - 19\,\eta^2\,\mu1\,\mu2 - 57\,\eta^3\,\mu1\,\mu2 - 19\,\eta t\,\mu1\,\mu2 - 57\,\eta\,\eta t$
$\mu1\,\mu2 + 19\,\eta^2\,\eta t\,\mu1\,\mu2 + 57\,\eta^3\,\eta t\,\mu1\,\mu2 - 14\,\theta p\,\mu1\,\mu2 + 18$
$\eta\,\theta p\,\mu1\,\mu2 + 430\,\eta^2\,\theta p\,\mu1\,\mu2 + 626\,\eta^3\,\theta p\,\mu1\,\mu2 + 100\,\eta^4$
$\theta p\,\mu1\,\mu2 - 100\,\eta^5\,\theta p\,\mu1\,\mu2 + 14\,\eta t\,\theta p\,\mu1\,\mu2 - 18\,\eta\,\eta t\,\theta p$
$\mu1\,\mu2 - 430\,\eta^2\,\eta t\,\theta p\,\mu1\,\mu2 - 626\,\eta^3\,\eta t\,\theta p\,\mu1\,\mu2 - 100$
$\eta^4\,\eta t\,\theta p\,\mu1\,\mu2 + 100\,\eta^5\,\eta t\,\theta p\,\mu1\,\mu2 + 2\,w^4\,(-1+\eta)^4$
$\big(-5 + 10\,\theta p - 10\,\mu1 - 4\,\theta p\,\mu1 + \mu1^2 - 14\,\theta p\,\mu1^2 + 12\,\eta^3\,\theta p\,(4 + 2\,\mu1 + 7\,\mu1^2) +$
$5\,\mu2 + 5\,\mu1\,\mu2 + 36\,\theta p\,\mu1\,\mu2 - \eta t\,(\mu1^2 + 5\,\mu1\,(-2+\mu2) +$
$5 \times (-1+\mu2) + \theta p\,(38 + 44\,\mu1^2 + 4\,\mu1\,(-2 + 9\,\mu2))) -$
$\eta\,(5 + 10\,\mu1 - 19\,\mu1^2 + \theta p\,(-68 + 20\,\mu1 + 70\,\mu1^2 - 216\,\mu1\,\mu2) +$
$\eta t\,(-5 - 10\,\mu1 + 19\,\mu1^2 + 2\,\theta p\,(59 - 2\,\mu1 + 11\,\mu1^2 + 108\,\mu1\,\mu2))) +$
$\eta^2\,(-5 \times (-2 + 4\,\mu1^2 + \mu1\,(-4+\mu2) + \mu2) + 108\,\theta p\,(1 + 2\,\mu1\,\mu2) +$
$\eta t\,(5 \times (-2 + 4\,\mu1^2 + \mu1\,(-4+\mu2) + \mu2) +$
$6\,\theta p\,(-13 + 11\,\mu1^2 - 2\,\mu1\,(1 + 18\,\mu2)))))\big) - 5\,\theta p$
$\Phi1 - 25\,\eta\,\theta p\,\Phi1 + 30\,\eta^3\,\theta p\,\Phi1 + 5\,\eta t\,\theta p\,\Phi1 + 25\,\eta\,\eta t\,\theta p\,\Phi1 - 30$
$\eta^3\,\eta t\,\theta p\,\Phi1 - 4\,\theta p\,\mu1\,\Phi1 - 46\,\eta\,\theta p\,\mu1\,\Phi1 - 79\,\eta^2\,\theta p\,\mu1$
$\Phi1 + 33\,\eta^3\,\theta p\,\mu1\,\Phi1 + 86\,\eta^4\,\theta p\,\mu1\,\Phi1 + 10\,\eta^5\,\theta p\,\mu1\,\Phi1 + 4$
$\eta t\,\theta p\,\mu1\,\Phi1 + 46\,\eta\,\eta t\,\theta p\,\mu1\,\Phi1 + 79\,\eta^2\,\eta t\,\theta p\,\mu1\,\Phi1 - 33\,\eta^3$
$\eta t\,\theta p\,\mu1\,\Phi1 - 86\,\eta^4\,\eta t\,\theta p\,\mu1\,\Phi1 - 10\,\eta^5\,\eta t\,\theta p\,\mu1\,\Phi1 + \theta p$
$\mu1^2\,\Phi1 - 3\,\eta\,\theta p\,\mu1^2\,\Phi1 - 25\,\eta^2\,\theta p\,\mu1^2\,\Phi1 - 9\,\eta^3\,\theta p\,\mu1^2$
$\Phi1 + 26\,\eta^4\,\theta p\,\mu1^2\,\Phi1 + 10\,\eta^5\,\theta p\,\mu1^2\,\Phi1 - \eta t\,\theta p\,\mu1^2\,\Phi1 + 3$
$\eta\,\eta t\,\theta p\,\mu1^2\,\Phi1 + 25\,\eta^2\,\eta t\,\theta p\,\mu1^2\,\Phi1 + 9\,\eta^3\,\eta t\,\theta p\,\mu1^2$
$\Phi1 - 26\,\eta^4\,\eta t\,\theta p\,\mu1^2\,\Phi1 - 10\,\eta^5\,\eta t\,\theta p\,\mu1^2\,\Phi1 - 5\,\theta p\,\mu2$
$\Phi1 - 25\,\eta\,\theta p\,\mu2\,\Phi1 + 30\,\eta^3\,\theta p\,\mu2\,\Phi1 + 5\,\eta t\,\theta p\,\mu2\,\Phi1 + 25$
$\eta\,\eta t\,\theta p\,\mu2\,\Phi1 - 30\,\eta^3\,\eta t\,\theta p\,\mu2\,\Phi1 - 5\,\theta p\,\mu1\,\mu2\,\Phi1 - 25\,\eta$
$\theta p\,\mu1\,\mu2\,\Phi1 + 30\,\eta^3\,\theta p\,\mu1\,\mu2\,\Phi1 + 5\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi1 + 25\,\eta$
$\eta t\,\theta p\,\mu1\,\mu2\,\Phi1 - 30\,\eta^3\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi1 + 5\,\theta p\,\Phi2 + 25\,\eta\,\theta p$
$\Phi2 - 30\,\eta^3\,\theta p\,\Phi2 - 5\,\eta t\,\theta p\,\Phi2 - 25\,\eta\,\eta t\,\theta p\,\Phi2 + 30\,\eta^3\,\eta t$
$\theta p\,\Phi2 + 4\,\theta p\,\mu1\,\Phi2 + 36\,\eta\,\theta p\,\mu1\,\Phi2 + 47\,\eta^2\,\theta p\,\mu1\,\Phi2 - 43$
$\eta^3\,\theta p\,\mu1\,\Phi2 - 54\,\eta^4\,\theta p\,\mu1\,\Phi2 + 10\,\eta^5\,\theta p\,\mu1\,\Phi2 - 4\,\eta t\,\theta p$
$\mu1\,\Phi2 - 36\,\eta\,\eta t\,\theta p\,\mu1\,\Phi2 - 47\,\eta^2\,\eta t\,\theta p\,\mu1\,\Phi2 + 43\,\eta^3\,\eta t$
$\theta p\,\mu1\,\Phi2 + 54\,\eta^4\,\eta t\,\theta p\,\mu1\,\Phi2 - 10\,\eta^5\,\eta t\,\theta p\,\mu1\,\Phi2 - \theta p\,\mu1^2$
$\Phi2 - 7\,\eta\,\theta p\,\mu1^2\,\Phi2 - 7\,\eta^2\,\theta p\,\mu1^2\,\Phi2 - \eta^3\,\theta p\,\mu1^2\,\Phi2 + 6\,\eta^4$
$\theta p\,\mu1^2\,\Phi2 + 10\,\eta^5\,\theta p\,\mu1^2\,\Phi2 + \eta t\,\theta p\,\mu1^2\,\Phi2 + 7\,\eta\,\eta t\,\theta p\,\mu1^2$
$\Phi2 + 7\,\eta^2\,\eta t\,\theta p\,\mu1^2\,\Phi2 + \eta^3\,\eta t\,\theta p\,\mu1^2\,\Phi2 - 6\,\eta^4\,\eta t\,\theta p\,\mu1^2$
$\Phi2 - 10\,\eta^5\,\eta t\,\theta p\,\mu1^2\,\Phi2 + 5\,\theta p\,\mu2\,\Phi2 + 25\,\eta\,\theta p\,\mu2\,\Phi2 - 30$
$\eta^3\,\theta p\,\mu2\,\Phi2 - 5\,\eta t\,\theta p\,\mu2\,\Phi2 - 25\,\eta\,\eta t\,\theta p\,\mu2\,\Phi2 + 30\,\eta^3\,\eta t$
$\theta p\,\mu2\,\Phi2 - 7\,\theta p\,\mu1\,\mu2\,\Phi2 + \eta\,\theta p\,\mu1\,\mu2\,\Phi2 + 108\,\eta^2\,\theta p\,\mu1$
$\mu2\,\Phi2 + 18\,\eta^3\,\theta p\,\mu1\,\mu2\,\Phi2 - 120\,\eta^4\,\theta p\,\mu1\,\mu2\,\Phi2 + 7\,\eta t\,\theta p$
$\mu1\,\mu2\,\Phi2 - \eta\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi2 - 108\,\eta^2\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi2 - 18$
$\eta^3\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi2 + 120\,\eta^4\,\eta t\,\theta p\,\mu1\,\mu2\,\Phi2 + w\,(-1+\eta) \times$
$\big(40 - 40\,\eta t - 40\,\theta p + 140\,\eta t\,\theta p + 44\,\mu1 - 44\,\eta t\,\mu1 - 46\,\theta p\,\mu1 + 6\,\eta t\,\theta p\,\mu1 -$
$8\,\mu1^2 + 8\,\eta t\,\mu1^2 + 6\,\theta p\,\mu1^2 + 214\,\eta t\,\theta p\,\mu1^2 + 5\,\mu2 - 5\,\eta t\,\mu2 -$
$24\,\theta p\,\mu2 + 24\,\eta t\,\theta p\,\mu2 - 67\,\mu1\,\mu2 + 67\,\eta t\,\mu1\,\mu2 - 24\,\theta p\,\mu1\,\mu2 +$
$24\,\eta t\,\theta p\,\mu1\,\mu2 + 15\,\theta p\,\Phi1 - 15\,\eta t\,\theta p\,\Phi1 + 19\,\theta p\,\mu1\,\Phi1 - 19\,\eta t\,\theta p\,\mu1\,\Phi1 -$
$2\,\theta p\,\mu1^2\,\Phi1 + 2\,\eta t\,\theta p\,\mu1^2\,\Phi1 + 15\,\theta p\,\mu2\,\Phi1 - 15\,\eta t\,\theta p\,\mu2\,\Phi1 +$

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15 θp μ1 μ2 Φ1 - 15 ηt θp μ1 μ2 Φ1 - 15 θp Φ2 + 15 ηt θp Φ2 -
19 θp μ1 Φ2 + 19 ηt θp μ1 Φ2 + 2 θp μ1^2 Φ2 - 2 ηt θp μ1^2 Φ2 -
15 θp μ2 Φ2 + 15 ηt θp μ2 Φ2 + 9 θp μ1 μ2 Φ2 - 9 ηt θp μ1 μ2 Φ2 +
2 η^5 (-8 × (-1 + ηt) μ1 (1 + μ1) + 5 θp (-48 + 2 × (-1 + ηt) μ2 -
      μ1 (41 - 10 μ2 + Φ1 + ηt (-17 + 10 μ2 - Φ1 - Φ2) + Φ2) +
      μ1^2 (-83 - Φ1 - Φ2 + ηt (-1 + Φ1 + Φ2)))) +
η (160 + 260 μ1 + 4 μ1^2 + 45 μ2 - 171 μ1 μ2 + θp (-364 + 75 Φ1 +
      μ2 (-134 + 75 Φ1 - 75 Φ2) + 2 μ1 (-124 + 74 Φ1 - 63 Φ2) +
      μ1 μ2 (-554 + 75 Φ1 - 27 Φ2) - 75 Φ2 + μ1^2 (176 + 7 Φ1 + 15 Φ2)) +
   ηt (-160 - 260 μ1 - 4 μ1^2 - 45 μ2 + 171 μ1 μ2 + θp (780 - 75 Φ1 + μ1^2
         (696 - 7 Φ1 - 15 Φ2) + 75 Φ2 + μ1 μ2 (554 - 75 Φ1 + 27 Φ2) +
         2 μ1 (84 - 74 Φ1 + 63 Φ2) + μ2 (134 - 75 Φ1 + 75 Φ2)))) +
η^2 (-20 + 172 μ1 - 96 μ1^2 - 5 μ2 + 67 μ1 μ2 + 4 θp (-207 -
      19 μ2 + μ1^2 (173 + 13 Φ1 + 4 Φ2) + μ1 (38 - 499 μ2 + 40 Φ1 -
         23 Φ2 - 54 μ2 Φ2)) + ηt (20 - 172 μ1 + 96 μ1^2 + 5 μ2 -
      67 μ1 μ2 - 4 θp (-312 - 19 μ2 + μ1^2 (-4 + 13 Φ1 + 4 Φ2) -
         μ1 (28 + 499 μ2 - 40 Φ1 + 23 Φ2 + 54 μ2 Φ2)))) +
η^3 (-180 - 316 μ1 + 68 μ1^2 - 45 μ2 + 171 μ1 μ2 + θp (834 μ1 -
      141 μ1 Φ1 - 2 μ2 (19 + 45 Φ1 - 45 Φ2) + μ1^2 (378 + 9 Φ1 - 7 Φ2) -
      90 × (12 + Φ1 - Φ2) + 143 μ1 Φ2 - 2 μ1 μ2 (841 + 45 Φ1 + 3 Φ2)) +
   ηt (-68 μ1^2 + μ1 (316 - 171 μ2) + 45 × (4 + μ2) + θp (1104 + 90 Φ1 +
         μ2 (38 + 90 Φ1 - 90 Φ2) - 90 Φ2 + μ1^2 (-498 - 9 Φ1 + 7 Φ2) +
         μ1 (-498 + 141 Φ1 - 143 Φ2 + 2 μ2 (841 + 45 Φ1 + 3 Φ2))))) +
2 η^4 (-8 × (-1 + ηt) × (-11 + μ1) μ1 + θp (-540 - 76 μ2 -
      μ1^2 (481 + 28 Φ1 + 8 Φ2) + μ1 (29 - 88 Φ1 + 52 Φ2 +
         20 μ2 (1 + 6 Φ2)) + ηt (300 + 76 μ2 + μ1^2 (61 + 28 Φ1 + 8 Φ2) -
         μ1 (149 - 88 Φ1 + 52 Φ2 + 20 μ2 (1 + 6 Φ2))))) + w^2
(-1 + η)^2 (-60 + 60 ηt + 74 θp - 270 ηt θp - 84 μ1 + 84 ηt μ1 +
   58 θp μ1 + 6 ηt θp μ1 + 12 μ1^2 - 12 ηt μ1^2 - 28 θp μ1^2 -
   396 ηt θp μ1^2 + 60 η^5 θp (4 + 2 μ1 + 7 μ1^2) + 15 μ2 - 15 ηt μ2 +
   14 θp μ2 - 14 ηt θp μ2 + 87 μ1 μ2 - 87 ηt μ1 μ2 + 182 θp μ1 μ2 -
   182 ηt θp μ1 μ2 - 15 θp Φ1 + 15 ηt θp Φ1 - 26 θp μ1 Φ1 +
   26 ηt θp μ1 Φ1 + θp μ1^2 Φ1 - ηt θp μ1^2 Φ1 - 15 θp μ2 Φ1 +
   15 ηt θp μ2 Φ1 - 15 θp μ1 μ2 Φ1 + 15 ηt θp μ1 μ2 Φ1 + 15 θp Φ2 -
   15 ηt θp Φ2 + 26 θp μ1 Φ2 - 26 ηt θp μ1 Φ2 - θp μ1^2 Φ2 +
   ηt θp μ1^2 Φ2 + 15 θp μ2 Φ2 - 15 ηt θp μ2 Φ2 + 3 θp μ1 μ2 Φ2 -
   3 ηt θp μ1 μ2 Φ2 + η^3 (180 + 388 μ1 - 92 μ1^2 + 45 μ2 - 171 μ1 μ2 -
      ηt (-92 μ1^2 + μ1 (388 - 171 μ2) + 45 × (4 + μ2) + 2 θp (568 + 45 Φ1 +
            μ1 (-200 + 87 Φ1 + μ2 (748 + 45 Φ1 - 21 Φ2) - 83 Φ2) +
            μ2 (52 + 45 Φ1 - 45 Φ2) + 4 μ1^2 (-78 + Φ2) - 45 Φ2)) + 2 θp
         (748 + 45 Φ1 + μ1 (-272 + 87 Φ1 + μ2 (748 + 45 Φ1 - 21 Φ2) -
            83 Φ2) + μ2 (52 + 45 Φ1 - 45 Φ2) - 45 Φ2 + 4 μ1^2 (21 + Φ2))) +
   η (48 μ1^2 - 45 × (4 + μ2) + 3 μ1 (-124 + 57 μ2) + ηt (180 +
         372 μ1 - 48 μ1^2 + 45 μ2 - 171 μ1 μ2 + θp (-1228 + 75 Φ1 + μ1
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                    (-144 + 157 Φ1 + μ2 (-1516 + 75 Φ1 - 51 Φ2) - 145 Φ2) + 25
                    μ2 (-4 + 3 Φ1 - 3 Φ2) - 75 Φ2 + 4 μ1^2 (-209 + Φ1 + 2 Φ2)) ) +
            θp (596 - 75 Φ1 - 25 μ2 (-4 + 3 Φ1 - 3 Φ2) + 75 Φ2 -
                4 μ1^2 (Φ1 + 2 × (54 + Φ2)) +
                μ1 (152 - 157 Φ1 + 145 Φ2 + μ2 (1516 - 75 Φ1 + 51 Φ2))) ) -
        2 η^4 (-8 × (-1 + ηt) × (-5 + μ1) μ1 + 5 θp (-2 × (53 + 5 μ2) -
                μ1^2 (128 + 3 Φ1 + Φ2) + μ1 (-30 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2)) +
                ηt (34 + 10 μ2 + μ1^2 (2 + 3 Φ1 + Φ2) - μ1 (6 - 9 Φ1 + 5 Φ2 +
                    2 μ2 (7 + 6 Φ2))))) + 3 η^2 (20 - 4 μ1 + 16 μ1^2 - 5 μ2 -
            29 μ1 μ2 + θp (6 × (71 + 7 μ2) - μ1^2 (332 + 9 Φ1 + 3 Φ2) +
                μ1 (-158 + 978 μ2 - 27 Φ1 + 15 Φ2 + 36 μ2 Φ2)) + ηt (-20 + 4 μ1 -
                16 μ1^2 + 5 μ2 + 29 μ1 μ2 + θp (-590 - 42 μ2 + 3 μ1^2 (24 + 3 Φ1 +
                    Φ2) + μ1 (22 + 27 Φ1 - 15 Φ2 - 6 μ2 (163 + 6 Φ2))))))) -
    w^3 (-1 + η)^3 (-40 + 40 ηt + 60 θp - 232 ηt θp - 68 μ1 + 68 ηt μ1 +
        8 θp μ1 + 32 ηt θp μ1 + 8 μ1^2 - 8 ηt μ1^2 - 52 θp μ1^2 -
        312 ηt θp μ1^2 + 80 η^4 θp (4 + 2 μ1 + 7 μ1^2) + 25 μ2 - 25 ηt μ2 +
        49 μ1 μ2 - 49 ηt μ1 μ2 + 216 θp μ1 μ2 - 216 ηt θp μ1 μ2 +
        η^2 (60 + 100 μ1 - 56 μ1^2 - 25 μ2 - 49 μ1 μ2 - 24 θp
            (-37 + 9 μ1 + 19 μ1^2 - 3 μ2 - 75 μ1 μ2) + ηt (-60 - 100 μ1 + 56 μ1^2 +
                25 μ2 + 49 μ1 μ2 + 12 θp (-83 + 29 μ1^2 - 6 μ2 - 150 μ1 μ2))) -
        5 θp Φ1 + 5 ηt θp Φ1 - 11 θp μ1 Φ1 + 11 ηt θp μ1 Φ1 - 5 θp μ2 Φ1 +
        5 ηt θp μ2 Φ1 - 5 θp μ1 μ2 Φ1 + 5 ηt θp μ1 μ2 Φ1 + 5 θp Φ2 -
        5 ηt θp Φ2 + 11 θp μ1 Φ2 - 11 ηt θp μ1 Φ2 + 5 θp μ2 Φ2 -
        5 ηt θp μ2 Φ2 + 5 θp μ1 μ2 Φ2 - 5 ηt θp μ1 μ2 Φ2 +
        η^3 (60 + 156 μ1 - 36 μ1^2 + 15 μ2 - 57 μ1 μ2 + θp (776 + 464 μ1^2 +
                30 Φ1 + μ1 (-56 + 66 Φ1 + 10 μ2 (44 + 3 Φ1 - 3 Φ2) - 66 Φ2) +
                μ2 (56 + 30 Φ1 - 30 Φ2) - 30 Φ2) +
            ηt (3 × (12 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
                2 θp (124 μ1^2 - 5 × (40 + 3 Φ1 - 3 Φ2) + μ2 (-28 - 15 Φ1 + 15 Φ2) +
                    μ1 (68 - 33 Φ1 - 5 μ2 (44 + 3 Φ1 - 3 Φ2) + 33 Φ2))) ) -
        η (80 + 188 μ1 - 84 μ1^2 + 15 μ2 - 57 μ1 μ2 + θp (-452 + 416 μ1^2 +
                25 Φ1 + μ1 (36 + 55 Φ1 + μ2 (-1412 + 25 Φ1 - 25 Φ2) - 55 Φ2) +
                5 μ2 (-4 + 5 Φ1 - 5 Φ2) - 25 Φ2) +
            ηt (-80 - 188 μ1 + 84 μ1^2 - 15 μ2 + 57 μ1 μ2 + θp
                (868 + 384 μ1^2 - 25 Φ1 - 5 μ2 (-4 + 5 Φ1 - 5 Φ2) + 25 Φ2 +
                    μ1 (28 - 55 Φ1 + 55 Φ2 + μ2 (1412 - 25 Φ1 + 25 Φ2))))))) -
x (-1 + η) × (4 w^2 (3 - 5 w + 2 w^2) η^10 θp (1 + μ1) - (1 + w)^3 (-5 w θl
        (1 + μ1) μ2 + 5 w ηt θl (1 + μ1) μ2 + ηt θp
        (10 + 8 μ1 - 2 μ1^2 + 2 w (5 - 7 μ1^2 + 2 θl (5 - 2 μ1 + 11 μ1^2) -
            5 μ1 (-2 + μ2) - 5 μ2) + 5 μ2 - 19 μ1 μ2)) -
    4 w η^9 θp (9 × (1 + μ1) + w^3 (9 + μ1 - 8 μ1^2 + 2 ηt (1 + μ1) + 9 μ1 μ2) +
        w (-8 - 12 μ1^2 + 3 ηt (1 + μ1) + 5 μ1 (-4 + 3 μ2)) - w^2
        (11 - 20 μ1^2 + 5 ηt (1 + μ1) + 3 μ1 (-3 + 8 μ2)) ) +
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2 η^8 θp (12 × (1 + μ1) + 2 w (2 - 27 μ1^2 + 9 ηt (1 + μ1) + μ1 (-43 + 45 μ2)) +
    w^4 (41 - 34 μ1 - 75 μ1^2 + 8 θl (4 + 2 μ1 + 7 μ1^2) +
        33 μ2 + 75 μ1 μ2 + 18 ηt (1 + μ1 + μ1 μ2)) + w^2
      (-39 + 50 μ1 + 29 μ1^2 + 12 θl (4 + 2 μ1 + 7 μ1^2) + 55 μ2 -
        83 μ1 μ2 + 2 ηt (-8 + μ1 (-8 + 15 μ2))) - 2
      w^3 (12 - 30 μ1 - 54 μ1^2 + 10 θl (4 + 2 μ1 + 7 μ1^2) + 44 μ2 +
        47 μ1 μ2 + ηt (11 + μ1 (11 + 24 μ2)))) -
η^2 (4 (1 + w)^2 (-1 - 2 w + 2 w^2) × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
    θp (2 w^4 (43 + 58 μ1 + 15 μ1^2 + 99 μ2 + 93 μ1 μ2 +
            3 ηt (3 + 8 μ1 + 29 μ1^2 - 15 μ2 + 3 μ1 μ2)) +
        2 w (-2 × (24 + 51 μ1 + 9 μ1^2 + 46 μ2 + 4 μ1 μ2) +
            ηt (-138 - 146 μ1 + 10 μ1^2 - 39 μ2 + 105 μ1 μ2)) +
        w^3 (4 × (52 + 59 μ1 - 5 μ1^2 + 66 μ2 + 90 μ1 μ2) +
            ηt (-152 - 428 μ1 + 456 μ1^2 - 213 μ2 + 219 μ1 μ2)) +
        w^2 (54 - 96 μ1 - 102 μ1^2 - 98 μ2 + 274 μ1 μ2 + ηt (-392 - 796 μ1 +
                340 μ1^2 - 193 μ2 + 395 μ1 μ2)) - 2 × (30 + 24 μ1 - 6 μ1^2 + 14 μ2 +
            38 μ1 μ2 + ηt (25 + 19 μ1^2 + 4 μ2 - 8 μ1 (2 + μ2)))) + θl
      (20 - 20 ηt - 70 θp + 150 ηt θp + 24 μ1 - 24 ηt μ1 - 90 θp μ1 +
        58 ηt θp μ1 + 16 μ1^2 - 16 ηt μ1^2 + 16 θp μ1^2 +
        160 ηt θp μ1^2 + 5 μ2 - 5 ηt μ2 - 42 θp μ2 + 42 ηt θp μ2 -
        19 μ1 μ2 + 19 ηt μ1 μ2 - 42 θp μ1 μ2 + 42 ηt θp μ1 μ2 -
        w^4 (40 + 80 μ1 + 64 μ1^2 + 8 θp (-1 + 14 μ1^2 + μ1 (4 - 18 μ2)) +
            5 μ2 + 5 μ1 μ2 + ηt (-64 μ1^2 - 5 × (8 + μ2) - 5 μ1 (16 + μ2) +
                4 θp (53 + 77 μ1^2 + 2 μ1 (-7 + 18 μ2)))) + 20 θp Φ1 -
        20 ηt θp Φ1 + 41 θp μ1 Φ1 - 41 ηt θp μ1 Φ1 + 3 θp μ1^2 Φ1 -
        3 ηt θp μ1^2 Φ1 + 20 θp μ2 Φ1 - 20 ηt θp μ2 Φ1 + 20 θp μ1 μ2 Φ1 -
        20 ηt θp μ1 μ2 Φ1 - 20 θp Φ2 + 20 ηt θp Φ2 - 33 θp μ1 Φ2 +
        33 ηt θp μ1 Φ2 + 5 θp μ1^2 Φ2 - 5 ηt θp μ1^2 Φ2 - 20 θp μ2 Φ2 +
        20 ηt θp μ2 Φ2 - 8 θp μ1 μ2 Φ2 + 8 ηt θp μ1 μ2 Φ2 +
        w^2 (-2 θp (151 + 9 μ2) - 3 × (20 + 8 μ1 + 16 μ1^2 - 5 μ2 - 29 μ1 μ2) +
            3 ηt (20 + 8 μ1 + 16 μ1^2 - 5 μ2 - 29 μ1 μ2) + θp μ1^2
              (296 + 9 Φ1 + 3 Φ2) - 3 θp μ1 (-34 - 9 Φ1 + 5 Φ2 + 6 μ2 (49 + 2 Φ2)) +
            ηt θp (2 × (67 + 9 μ2) - μ1^2 (752 + 9 Φ1 + 3 Φ2) +
                3 μ1 (46 - 9 Φ1 + 5 Φ2 + 6 μ2 (49 + 2 Φ2)))) +
        w^3 (-100 - 144 μ1 - 128 μ1^2 + 5 μ2 + 53 μ1 μ2 + 2 θp
              (-62 + 26 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (-8 - 5 Φ1 + 5 Φ2) +
                μ1 (36 - 11 Φ1 + 11 Φ2 + μ2 (-68 - 5 Φ1 + 5 Φ2))) +
            ηt (100 + 144 μ1 + 128 μ1^2 - 5 μ2 - 53 μ1 μ2 - 2 θp (152 + 504 μ1^2 -
                    5 Φ1 - μ1 (64 + 11 Φ1 + μ2 (68 + 5 Φ1 - 5 Φ2) - 11 Φ2) + 5 Φ2 +
                    μ2 (-8 - 5 Φ1 + 5 Φ2)))) - 2 w (-10 - 32 μ1 - 16 μ1^2 -
            5 μ2 - 5 μ1 μ2 + ηt (10 + 32 μ1 + 16 μ1^2 + 5 μ2 + 5 μ1 μ2 +
                θp (μ1 μ2 (-302 + 15 Φ1 - 27 Φ2) + μ2 (-26 + 15 Φ1 - 15 Φ2) +
                    5 μ1 (-16 + 9 Φ1 - 7 Φ2) + 5 × (-40 + 3 Φ1 - 3 Φ2) +
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                μ1^2 (-48 + 6 Φ1 + 4 Φ2))) + θp (-2 μ1^2 (40 + 3 Φ1 + 2 Φ2) +
            3 × (44 - 5 Φ1 + 5 Φ2) + μ2 (26 - 15 Φ1 + 15 Φ2) +
            μ1 (64 - 45 Φ1 + 35 Φ2 + μ2 (302 - 15 Φ1 + 27 Φ2))))))) +
η^7 (-4 θp (8 - 15 μ1^2 + 6 ηt (1 + μ1) + 5 μ1 (-5 + 6 μ2)) + w^4
    (4 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
      2 θp (2 × (-41 + 60 μ1^2 + μ1 (19 - 31 μ2) - 88 μ2) +
          ηt (-36 + 32 μ1^2 + 5 μ2 - μ1 (46 + 91 μ2))) +
      θl (10 + 20 μ1 - 14 μ1^2 - 8 θp (10 + 49 μ1^2 + μ1 (14 - 36 μ2)) -
          5 μ2 - 5 μ1 μ2 + ηt (14 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2) +
              12 θp (-7 + 11 μ1^2 - 2 μ1 (1 + 12 μ2))))) + w
    (-4 × (-1 + ηt) θl μ1 (1 + μ1) + θp (44 + 84 μ1 + 64 μ1^2 - 216 μ2 -
          84 μ1 μ2 - θl (2 × (96 + 5 μ2) + μ1^2 (334 + 5 Φ1 + 5 Φ2) +
              μ1 (166 - 50 μ2 + 5 Φ1 + 5 Φ2)) + ηt (-8 + 10 θl μ2 +
              μ1 (-24 × (1 + 5 μ2) + 5 θl (14 - 10 μ2 + Φ1 + Φ2)) +
              μ1^2 (-16 + θl (-2 + 5 Φ1 + 5 Φ2))))) + w^3
    (-4 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (88 + 544 μ2 -
          4 μ1 (-64 + 65 μ2) + ηt (28 - 84 μ1^2 + 27 μ2 + μ1 (112 + 219 μ2))) +
      θl (-20 - 52 μ1 + 4 μ1^2 - 5 μ2 + 19 μ1 μ2 + 4 θp
            (-1 + 111 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (-6 - 5 Φ1 + 5 Φ2) +
              μ1 (56 - 11 Φ1 - 5 μ2 (12 + Φ1 - Φ2) + 11 Φ2)) +
          ηt (20 + 52 μ1 - 4 μ1^2 + 5 μ2 - 19 μ1 μ2 - 4 θp
                (43 μ1^2 - 5 × (9 + Φ1 - Φ2) + μ2 (-6 - 5 Φ1 + 5 Φ2) +
                  μ1 (16 - 11 Φ1 - 5 μ2 (12 + Φ1 - Φ2) + 11 Φ2))))) +
  w^2 (4 × (-1 + ηt) θl (-5 + μ1) μ1 + θp (76 - 572 μ1 - 408 μ1^2 +
          80 μ2 + 680 μ1 μ2 + θl (338 + 50 μ2 + 5 μ1^2 (68 + 3 Φ1 + Φ2) - 5 μ1
                (-18 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2))) + ηt (16 × (8 + 2 μ1^2 - μ2 +
                  μ1 (4 + 5 μ2)) - θl (146 + 50 μ2 + μ1^2 (4 + 15 Φ1 + 5 Φ2) -
                  μ1 (6 + 70 μ2 - 45 Φ1 + 25 Φ2 + 60 μ2 Φ2)))))) +
η (4 w (1 + w)^3 (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (2 w^2 (46 +
          58 μ1 + ηt (-4 + 14 μ1^2 + 7 μ1 (-8 + μ2) - 53 μ2) + 50 μ2 + 14 μ1 μ2) +
      2 ηt (8 μ1^2 - 5 × (4 + μ2) + μ1 (-24 + 19 μ2)) +
      w^4 (ηt (36 + 76 μ1 - 20 μ1^2 - 50 μ2 - 26 μ1 μ2) +
          4 × (5 + 8 μ1 + 3 μ1^2 + 11 μ2 + 5 μ1 μ2)) +
      w^3 (ηt (68 + 80 μ1 - 24 μ1^2 - 123 μ2 - 51 μ1 μ2) +
          4 × (20 + 31 μ1 + 5 μ1^2 + 30 μ2 + 6 μ1 μ2)) + w (-8 × (1 + μ1) ×
            (-5 + μ1 - 3 μ2) + ηt (-80 - 164 μ1 + 48 μ1^2 - 43 μ2 + 77 μ1 μ2))) +
  θl (-10 + 10 ηt + 20 θp - 60 ηt θp - 8 μ1 + 8 ηt μ1 + 16 θp μ1 +
      2 μ1^2 - 2 ηt μ1^2 - 4 θp μ1^2 - 84 ηt θp μ1^2 - 5 μ2 + 5 ηt μ2 +
      20 θp μ2 - 20 ηt θp μ2 + 19 μ1 μ2 - 19 ηt μ1 μ2 - 28 θp μ1 μ2 +
      28 ηt θp μ1 μ2 + w^4 (-8 θp (-5 + 7 μ1^2 + μ1 (2 - 18 μ2)) -
          5 × (1 + μ1) × (2 + 2 μ1 + 3 μ2) + 5 ηt (1 + μ1) × (2 + 2 μ1 + 3 μ2) +
          4 ηt θp (-13 + 11 μ1^2 - 2 μ1 (1 + 18 μ2))) - 10 θp Φ1 +
      10 ηt θp Φ1 - 8 θp μ1 Φ1 + 8 ηt θp μ1 Φ1 + 2 θp μ1^2 Φ1 -
```

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2 ηt θp μ1^2 Φ1 - 10 θp μ2 Φ1 + 10 ηt θp μ2 Φ1 - 10 θp μ1 μ2 Φ1 +
10 ηt θp μ1 μ2 Φ1 + 10 θp Φ2 - 10 ηt θp Φ2 + 8 θp μ1 Φ2 -
8 ηt θp μ1 Φ2 - 2 θp μ1^2 Φ2 + 2 ηt θp μ1^2 Φ2 + 10 θp μ2 Φ2 -
10 ηt θp μ2 Φ2 - 14 θp μ1 μ2 Φ2 + 14 ηt θp μ1 μ2 Φ2 -
2 w^2 (3 × (4 μ1^2 - 7 μ1 (-2 + μ2) + 5 × (2 + μ2)) - θp
      (74 - 15 Φ1 + μ1^2 (-28 + Φ1 - Φ2) + 15 Φ2 + μ2 (14 - 15 Φ1 + 15 Φ2) +
         μ1 (58 - 26 Φ1 + 26 Φ2 + μ2 (182 - 15 Φ1 + 3 Φ2))) +
    ηt (-3 × (4 μ1^2 - 7 μ1 (-2 + μ2) + 5 × (2 + μ2)) + θp (μ1^2 (198 +
              Φ1 - Φ2) + 15 × (12 - Φ1 + Φ2) + μ2 (14 - 15 Φ1 + 15 Φ2) +
           μ1 (30 - 26 Φ1 + 26 Φ2 + μ2 (182 - 15 Φ1 + 3 Φ2)))))) -
w (40 + 44 μ1 + 4 μ1^2 + 15 μ2 - 57 μ1 μ2 - 2 θp (-3 μ2 (-8 +
              5 Φ1 - 5 Φ2) + 2 μ1^2 (-3 + Φ1 - Φ2) + 5 × (8 - 3 Φ1 + 3 Φ2) +
         μ1 (46 - 19 Φ1 + 19 Φ2 - 3 μ2 (-8 + 5 Φ1 + 3 Φ2))) +
    ηt (-4 μ1^2 - 5 × (8 + 3 μ2) + μ1 (-44 + 57 μ2) + 2 θp
          (-3 (μ2 (-8 + 5 Φ1 - 5 Φ2) + 5 × (-8 + Φ1 - Φ2)) +
            2 μ1^2 (85 + Φ1 - Φ2) + μ1 (14 - 19 Φ1 +
               19 Φ2 - 3 μ2 (-8 + 5 Φ1 + 3 Φ2)))))) -
w^3 (40 + 68 μ1 + 28 μ1^2 + 35 μ2 + 11 μ1 μ2 + 2 θp (52 μ1^2 + 5 ×
            (1 + μ2) Φ1 + μ1 (-8 + 11 Φ1 + μ2 (-216 + 5 Φ1 - 5 Φ2) - 11 Φ2) -
         5 × (12 + Φ2 + μ2 Φ2)) + ηt (-40 - 68 μ1 - 28 μ1^2 - 35 μ2 -
         11 μ1 μ2 + 2 θp (112 + 48 μ1^2 - 5 × (1 + μ2) Φ1 + 5 Φ2 + 5 μ2 Φ2 +
            μ1 (16 - 11 Φ1 + 11 Φ2 + μ2 (216 - 5 Φ1 + 5 Φ2)))))))) +
η^4 (4 × (1 - 4 w - 6 w^2 + 4 w^3 + 4 w^4) × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
   θp (ηt (-68 - 16 μ1 + 28 μ1^2 + 5 μ2 - 79 μ1 μ2) +
      2 × (-61 - 26 μ1 + 23 μ1^2 - 85 μ2 - 43 μ1 μ2) +
      w^3 (4 × (134 + 234 μ1 + 40 μ1^2 + 320 μ2 - 319 μ1 μ2) -
         15 ηt (-20 - 40 μ1 + 60 μ1^2 + 11 μ2 - 29 μ1 μ2)) -
      2 w^4 (-23 - 122 μ1 - 99 μ1^2 - 55 μ2 + 587 μ1 μ2 +
         ηt (-99 - 224 μ1 + 535 μ1^2 + 25 μ2 - 5 μ1 μ2)) +
      w (-4 × (21 + 137 μ1 + 50 μ1^2 + 132 μ2 - 186 μ1 μ2) +
         ηt (-248 - 532 μ1 + 448 μ1^2 - 89 μ2 + 55 μ1 μ2)) +
      w^2 (6 × (65 - 6 μ1 - 59 μ1^2 + 103 μ2 + 141 μ1 μ2) +
         ηt (-108 - 588 μ1 + 552 μ1^2 - 223 μ2 + 605 μ1 μ2))) + θl
    (20 - 20 ηt + 178 θp - 194 ηt θp + 36 μ1 - 36 ηt μ1 - 176 θp μ1 +
      96 ηt θp μ1 + 4 μ1^2 - 4 ηt μ1^2 - 102 θp μ1^2 + 110 ηt θp μ1^2 + 5 μ2 -
      5 ηt μ2 - 12 θp μ2 + 12 ηt θp μ2 - 19 μ1 μ2 + 19 ηt μ1 μ2 + 384 θp μ1 μ2 -
      384 ηt θp μ1 μ2 + w^4 (-5 × (-1 + ηt) × (48 μ1^2 - 5 μ2 - 5 μ1 μ2) +
         4 θp (4 × (7 - 35 μ1^2 + 2 μ1 (-5 + 27 μ2)) +
            ηt (-83 + 55 μ1^2 - 2 μ1 (5 + 108 μ2)))) + 20 θp Φ1 -
      20 ηt θp Φ1 + 36 θp μ1 Φ1 - 36 ηt θp μ1 Φ1 - 2 θp μ1^2 Φ1 +
      2 ηt θp μ1^2 Φ1 + 20 θp μ2 Φ1 - 20 ηt θp μ2 Φ1 + 20 θp μ1 μ2 Φ1 -
      20 ηt θp μ1 μ2 Φ1 - 20 θp Φ2 + 20 ηt θp Φ2 - 38 θp μ1 Φ2 + 38 ηt θp μ1 Φ2 -
      20 θp μ2 Φ2 + 20 ηt θp μ2 Φ2 - 8 θp μ1 μ2 Φ2 + 8 ηt θp μ1 μ2 Φ2 +
      w (20 + 128 μ1 - 48 μ1^2 + 5 μ2 + 5 μ1 μ2 + 2 θp (42 + 8 μ2 + 15 Φ1 + 15 μ2
```

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                Φ1 + μ1 (-120 + 87 Φ1 + μ2 (-292 + 15 Φ1 - 87 Φ2) - 63 Φ2) -
              15 Φ2 - 15 μ2 Φ2 + 6 μ1^2 (31 + 3 Φ1 + Φ2)) - ηt (20 + 128 μ1 -
              48 μ1^2 + 5 μ2 + 5 μ1 μ2 + 2 θp (-84 + 8 μ2 + 15 Φ1 + 15 μ2 Φ1 +
                 μ1 (-156 + 87 Φ1 + μ2 (-292 + 15 Φ1 - 87 Φ2) - 63 Φ2) -
                 15 Φ2 - 15 μ2 Φ2 + 6 μ1^2 (-8 + 3 Φ1 + Φ2))))) +
        w^2 (-120 - 152 μ1 - 80 μ1^2 - 15 μ2 + 129 μ1 μ2 + 2 θp
             (-6 × (29 + 5 Φ1 + μ2 (-3 + 5 Φ1 - 5 Φ2) - 5 Φ2) + μ1^2 (480 + 17 Φ1 +
                 3 Φ2) - μ1 (-282 + 7 Φ1 - 27 Φ2 + 6 μ2 (153 + 5 Φ1 + 9 Φ2))) +
           ηt (80 μ1^2 + μ1 (152 - 129 μ2) + 15 × (8 + μ2) - 2 θp (-208 - 30 Φ1 -
                 6 μ2 (-3 + 5 Φ1 - 5 Φ2) + 30 Φ2 + μ1^2 (542 + 17 Φ1 + 3 Φ2) -
                 μ1 (-22 + 7 Φ1 - 27 Φ2 + 6 μ2 (153 + 5 Φ1 + 9 Φ2))))) -
        w^3 (120 + 288 μ1 - 192 μ1^2 + 35 μ2 - 61 μ1 μ2 + 4 θp (62 +
              40 μ1^2 + 15 Φ1 + 3 μ1 (-20 + 11 Φ1 + μ2 (-32 + 5 Φ1 - 5 Φ2) -
                 11 Φ2) + 3 μ2 (4 + 5 Φ1 - 5 Φ2) - 15 Φ2) +
           ηt (-120 - 288 μ1 + 192 μ1^2 - 35 μ2 + 61 μ1 μ2 + 4 θp
                (67 + 233 μ1^2 - 15 Φ1 - 3 μ2 (4 + 5 Φ1 - 5 Φ2) + 15 Φ2 +
                 μ1 (30 - 33 Φ1 + 33 Φ2 + μ2 (96 - 15 Φ1 + 15 Φ2))))))) +
η^5 (w^4 (-4 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) - 4 θp (62 + 45 μ1^2 +
              μ1 (107 - 270 μ2) + 165 μ2) +
        6 ηt θp (146 μ1^2 + 15 × (-2 + μ2) - 5 μ1 (14 + 9 μ2)) +
        θl (-5 × (-10 + 38 μ1^2 + μ1 (-20 + μ2) + μ2) + 8 θp (29 + 35 μ1^2 +
              2 μ1 (5 + 9 μ2)) + ηt (5 × (-10 + 38 μ1^2 + μ1 (-20 + μ2) + μ2) +
              4 θp (37 + 121 μ1^2 - 2 μ1 (11 + 18 μ2))))) + w^3
      (20 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (-500 + 4 × (85 + 24 ηt) μ1^2 +
              5 × (-200 + 51 ηt) μ2 + μ1 (-280 + 228 ηt + 80 μ2 - 729 ηt μ2)) +
        θl (80 + 132 μ1 - 68 μ1^2 - 25 μ2 - 49 μ1 μ2 + ηt (-80 - 132 μ1 +
              68 μ1^2 + 25 μ2 + 49 μ1 μ2 + 2 θp (-212 + 468 μ1^2 + 5 Φ1 +
                 μ1 (-104 + 11 Φ1 + μ2 (-784 + 5 Φ1 - 5 Φ2) - 11 Φ2) +
                 μ2 (-16 + 5 Φ1 - 5 Φ2) - 5 Φ2)) - 2 θp (-144 + 488 μ1^2 +
              5 Φ1 + μ1 (128 + 11 Φ1 + μ2 (-784 + 5 Φ1 - 5 Φ2) - 11 Φ2) +
              μ2 (-16 + 5 Φ1 - 5 Φ2) - 5 Φ2))) - 2 ×
      (12 × (-1 + ηt) θl μ1 + θp (-34 + 78 μ1 + 52 μ1^2 + 30 μ2 -
              90 μ1 μ2 - θl (97 + 14 μ2 + μ1^2 (75 + 7 Φ1 + 2 Φ2) +
                 μ1 (-14 + 20 μ2 + 22 Φ1 - 13 Φ2 - 30 μ2 Φ2)) + ηt
                (-4 × (5 + μ1 (-7 + μ2) - 2 μ2) + θl (65 + 14 μ2 + μ1^2 (19 + 7 Φ1 +
                       2 Φ2) + μ1 (-30 + 20 μ2 + 22 Φ1 - 13 Φ2 - 30 μ2 Φ2))))) +
      2 w^2 (6 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (90 + 232 μ1^2 +
              μ1 (526 - 632 μ2) + 394 μ2 +
              ηt (150 - 298 μ1^2 + μ1 (362 - 41 μ2) + 91 μ2)) +
        θl (3 × (8 μ1^2 - 5 × (2 + μ2) + μ1 (-30 + 7 μ2)) - θp (184 +
              45 × (1 + μ2) Φ1 + μ1 (-124 + 105 Φ1 + 9 μ2 (-24 + 5 Φ1 - 5 Φ2) -
                 93 Φ2) - 45 Φ2 - 45 μ2 Φ2 + μ1^2 (268 + 6 Φ1 + 6 Φ2)) +
           ηt (3 × (-8 μ1^2 + μ1 (30 - 7 μ2) + 5 × (2 + μ2)) + θp
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                    (μ1 (-160 + 105 Φ1 + 9 μ2 (-24 + 5 Φ1 - 5 Φ2) - 93 Φ2) +
                      2 μ1^2 (-91 + 3 Φ1 + 3 Φ2) +
                      5 × (-10 + 9 × (1 + μ2) Φ1 - 9 × (1 + μ2) Φ2))))) + w
          (-12 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (4 × (70 - 45
                  μ1^2 + 146 μ2 + 5 μ1 (5 + 7 μ2)) +
              ηt (204 - 100 μ1^2 - 15 μ2 + μ1 (32 + 273 μ2))) + θl
            (-60 - 76 μ1 - 4 μ1^2 - 15 μ2 + 57 μ1 μ2 + 2 θp (-10 × (5 + 3 Φ1 - 3 Φ2) +
                μ1^2 (290 + 13 Φ1 + Φ2) + μ2 (34 - 30 Φ1 + 30 Φ2) -
                μ1 (-216 + 17 Φ1 - 31 Φ2 + μ2 (494 + 30 Φ1 + 42 Φ2))) +
              ηt (60 + 76 μ1 + 4 μ1^2 + 15 μ2 - 57 μ1 μ2 - 2 θp (-122 - 30 Φ1 +
                  30 Φ2 + μ1^2 (218 + 13 Φ1 + Φ2) + μ2 (34 - 30 Φ1 + 30 Φ2) -
                  μ1 (-72 + 17 Φ1 - 31 Φ2 + μ2 (494 + 30 Φ1 + 42 Φ2)))))))) -
η^3 (4 × (-2 - 2 w + 6 w^2 + 7 w^3 + w^4) × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
    θp (-8 × (-2 + 9 μ1 + 5 μ1^2 + 12 μ2 - 18 μ1 μ2) +
      2 ηt (-22 - 80 μ1 + 50 μ1^2 - 9 μ2 + 15 μ1 μ2) +
      w^3 (4 × (8 + 80 μ1 + 54 μ1^2 + 76 μ2 - 287 μ1 μ2) +
          ηt (436 + 1016 μ1 - 1100 μ1^2 + 95 μ2 - 241 μ1 μ2)) -
      4 w^2 (-95 - 169 μ1 - 26 μ1^2 - 218 μ2 + 58 μ1 μ2 +
          ηt (-102 - 142 μ1 + 38 μ1^2 - 7 μ2 + 5 μ1 μ2)) -
      2 w^4 (54 + 34 μ1 - 20 μ1^2 + 132 μ2 + 330 μ1 μ2 +
          ηt (-48 - 98 μ1 + 340 μ1^2 - 25 μ2 + 47 μ1 μ2)) +
      2 w (124 + 58 μ1 - 54 μ1^2 + 100 μ2 + 256 μ1 μ2 +
          ηt (18 - 166 μ1 + 182 μ1^2 - 21 μ2 + 75 μ1 μ2))) + θl
    (-10 + 10 ηt - 106 θp + 130 ηt θp + 24 μ1 - 24 ηt μ1 - 20 θp μ1 +
      68 ηt θp μ1 - 14 μ1^2 + 14 ηt μ1^2 + 98 θp μ1^2 - 74 ηt θp μ1^2 - 5 μ2 +
      5 ηt μ2 + 8 θp μ2 - 8 ηt θp μ2 + 19 μ1 μ2 - 19 ηt μ1 μ2 - 364 θp μ1 μ2 +
      364 ηt θp μ1 μ2 + w^4 (-24 θp (-8 + 7 μ1^2 + μ1 (2 - 24 μ2)) +
          5 × (34 μ1^2 - 5 μ1 (-4 + μ2) - 5 × (-2 + μ2)) +
          5 ηt (-34 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2)) +
          12 ηt θp (1 + 55 μ1^2 - 2 μ1 (5 + 24 μ2))) - 10 θp Φ1 +
      10 ηt θp Φ1 + 36 θp μ1 Φ1 - 36 ηt θp μ1 Φ1 + 16 θp μ1^2 Φ1 -
      16 ηt θp μ1^2 Φ1 - 10 θp μ2 Φ1 + 10 ηt θp μ2 Φ1 - 10 θp μ1 μ2 Φ1 +
      10 ηt θp μ1 μ2 Φ1 + 10 θp Φ2 - 10 ηt θp Φ2 - 18 θp μ1 Φ2 +
      18 ηt θp μ1 Φ2 + 2 θp μ1^2 Φ2 - 2 ηt θp μ1^2 Φ2 + 10 θp μ2 Φ2 -
      10 ηt θp μ2 Φ2 - 74 θp μ1 μ2 Φ2 + 74 ηt θp μ1 μ2 Φ2 +
      w^3 (20 - 52 μ1 + 228 μ1^2 - 65 μ2 - 41 μ1 μ2 +
          ηt (-20 + 52 μ1 - 228 μ1^2 + 65 μ2 + 41 μ1 μ2 + 4 θp (-117 + 167 μ1^2 +
                10 Φ1 + 2 μ1 (-38 + 11 Φ1 + 5 μ2 (-44 + Φ1 - Φ2) - 11 Φ2) +
                2 μ2 (-1 + 5 Φ1 - 5 Φ2) - 10 Φ2)) + θp (404 - 636 μ1^2 -
            40 Φ1 - 8 μ1 (2 + 11 Φ1 + 5 μ2 (-44 + Φ1 - Φ2) - 11 Φ2) +
            40 Φ2 + μ2 (8 - 40 Φ1 + 40 Φ2))) - w^2 (12 (μ1^2 +
            μ1 (23 - 7 μ2) + 5 × (2 + μ2)) - θp (μ1^2 (5 Φ1 - 9 × (28 + Φ2)) +
            μ1 (454 - 217 Φ1 + 213 Φ2 + μ2 (726 - 120 Φ1 + 36 Φ2)) + 2 ×
              (59 - 60 Φ1 + 60 Φ2 + μ2 (39 - 60 Φ1 + 60 Φ2))) + ηt (-12 (μ1^2 +
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                μ1 (23 - 7 μ2) + 5 × (2 + μ2)) + θp (μ1^2 (764 + 5 Φ1 - 9 Φ2) +
                6 × (101 - 20 Φ1 + 20 Φ2 + μ2 (13 - 20 Φ1 + 20 Φ2)) +
                μ1 (374 - 217 Φ1 + 213 Φ2 + μ2 (726 - 120 Φ1 + 36 Φ2))))) +
        w (-2 × (50 + 42 μ1^2 + μ1 (50 - 57 μ2) + 15 μ2) + θp (-212 - 90 Φ1 +
            μ1^2 (234 + 25 Φ1 - 7 Φ2) + 90 Φ2 + μ2 (106 - 90 Φ1 + 90 Φ2) -
            μ1 (-358 + 77 Φ1 - 95 Φ2 + 2 μ2 (445 + 45 Φ1 + 51 Φ2))) +
          ηt (2 × (50 + 42 μ1^2 + μ1 (50 - 57 μ2) + 15 μ2) +
            θp (4 + 90 Φ1 + 2 μ2 (-53 + 45 Φ1 - 45 Φ2) -
              90 Φ2 + μ1^2 (-778 - 25 Φ1 + 7 Φ2) + μ1
               (-102 + 77 Φ1 - 95 Φ2 + 2 μ2 (445 + 45 Φ1 + 51 Φ2)))))) +
η^6 (18 θp + 8 ηt θp + 72 θl θp + 24 ηt θl θp - 4 θl μ1 + 4 ηt θl μ1 -
    36 θp μ1 + 24 ηt θp μ1 + 94 θl θp μ1 - 46 ηt θl θp
     μ1 - 4 θl μ1^2 + 4 ηt θl μ1^2 - 30 θp μ1^2 + 16 ηt
     θp μ1^2 + 166 θl θp μ1^2 + 2 ηt θl θp μ1^2 + 106 θp
     μ2 + 10 θl θp μ2 - 10 ηt θl θp μ2 + 94 θp μ1 μ2 + 60
     ηt θp μ1 μ2 - 50 θl θp μ1 μ2 + 50 ηt θl θp μ1
     μ2 + w^4 (-8 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
       θl (24 θp (-7 + 14 μ1^2 + μ1 (4 - 30 μ2)) + 5 × (-8 + 16 μ1^2 + 3 μ2 +
             μ1 (-16 + 3 μ2)) - 5 ηt (-8 + 16 μ1^2 + 3 μ2 + μ1 (-16 + 3 μ2)) +
           ηt θp (140 - 484 μ1^2 + 8 μ1 (11 + 90 μ2)) + 2
          θp (135 - 41 μ1^2 + μ1 (94 - 195 μ2) + 363 μ2 +
           ηt (57 - 185 μ1^2 - 25 μ2 + μ1 (112 + 173 μ2)))) + 5 θl
     θp μ1 Φ1 - 5 ηt θl θp μ1 Φ1 + 5 θl θp μ1^2 Φ1 - 5 ηt θl θp μ1^2
     Φ1 + 5 θl θp μ1 Φ2 - 5 ηt θl θp μ1 Φ2 + 5 θl θp μ1^2 Φ2 - 5 ηt
     θl θp μ1^2 Φ2 + w^3 (-8 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
       θp (60 - 460 μ1^2 - 200 μ2 + 32 μ1 (-17 + 23 μ2) +
           ηt (-48 + 224 μ1^2 - 137 μ2 + μ1 (-340 + 151 μ2)) +
       θl (20 + 80 μ1 + 25 μ2 - 23 μ1 μ2 + 2 θp (142 + 246 μ1^2 + 25 Φ1 + μ2
                (16 + 25 Φ1 - 25 Φ2) + 5 μ1 μ2 (-52 + 5 Φ1 - 5 Φ2) + 11 μ1 (-4 +
                 5 Φ1 - 5 Φ2) - 25 Φ2) + ηt (-20 - 80 μ1 - 25 μ2 + 23 μ1 μ2 +
             2 θp (12 + 28 μ1^2 - 25 Φ1 + 25 Φ2 + μ2 (-16 - 25 Φ1 + 25 Φ2) +
                 μ1 (112 - 55 Φ1 - 5 μ2 (-52 + 5 Φ1 - 5 Φ2) + 55 Φ2)))) + 4
     w (12 × (-1 + ηt) θl μ1 + θp (-25 + 113 μ1 + 72 μ1^2 + 38 μ2 -
           127 μ1 μ2 - θl (87 + 17 μ2 + μ1^2 (53 + 6 Φ1 + Φ2) +
               μ1 (21 Φ1 + μ2 (5 - 30 Φ2) - 14 × (2 + Φ2))) + ηt (-26 - 4 μ1^2 +
               8 μ2 + 2 μ1 (9 + μ2) + θl (63 + 17 μ2 + μ1^2 (11 + 6 Φ1 + Φ2) +
                 μ1 (-40 + 5 μ2 + 21 Φ1 - 14 Φ2 - 30 μ2 Φ2)))) + w^2
     (12 × (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) + θp (-270 + 194 μ1^2 -
           922 μ2 - 2 μ1 (86 + 11 μ2) +
           ηt (-192 + 124 μ1^2 - 17 μ2 - μ1 (188 + 389 μ2))) +
       θl (60 + 96 μ1 + 15 μ2 - 57 μ1 μ2 - θp (50 - 60 Φ1 + 60 Φ2 +
               μ1^2 (832 + 25 Φ1 + 3 Φ2) + μ2 (54 - 60 Φ1 + 60 Φ2) -
               μ1 (-510 + 41 Φ1 - 69 Φ2 + μ2 (954 + 60 Φ1 + 72 Φ2))) +
           ηt (-15 × (4 + μ2) + μ1 (-96 + 57 μ2) + θp (-222 - 60 Φ1 +
```

$$60\,\Phi2 + \mu1^2\,(464 + 25\,\Phi1 + 3\,\Phi2) + \mu2\,(54 - 60\,\Phi1 + 60\,\Phi2) -$$
$$\mu1\,(-158 + 41\,\Phi1 - 69\,\Phi2 + \mu2\,(954 + 60\,\Phi1 + 72\,\Phi2)))))))) +$$
$$x^4\,(-1+\eta)^4\,\Big(4\,(-1 + w\,(-1+\eta))^3\,(-2 + w\,(-1+\eta) - 4\,\eta) \times (-1 + \eta t)$$
$$\theta l^2\,\left(5 - 2\,\mu1 + 11\,\mu1^2\right) +$$
$$2\,(-1+\eta)^2\,\theta p\,\Big(13 + 7\,\eta - 10\,\eta^2 + 30\,\eta^3 - 2\,\eta t - 20\,\eta\,\eta t - 30\,\eta^2$$
$$\eta t + 21\,\mu1 + 112\,\eta\,\mu1 + 155\,\eta^2\,\mu1 + 30\,\eta^3\,\mu1 - 10\,\eta t$$
$$\mu1 - 18\,\eta\,\eta t\,\mu1 - 30\,\eta^2\,\eta t\,\mu1 + 2\,\mu1^2 + 45\,\eta\,\mu1^2 + 75$$
$$\eta^2\,\mu1^2 + 4\,\eta t\,\mu1^2 + 2\,\eta\,\eta t\,\mu1^2 + w^4\,(-1+\eta)^4\,(1+\mu1)$$
$$(\eta - \eta t + 4\,\mu1) + 19\,\mu2 + 47\,\eta\,\mu2 - 2\,\eta t\,\mu2 + \mu1\,\mu2 - 7\,\eta\,\mu1$$
$$\mu2 - 60\,\eta^2\,\mu1\,\mu2 + 16\,\eta t\,\mu1\,\mu2 + 30\,\eta\,\eta t\,\mu1\,\mu2 - w^3\,(-1+\eta)^3$$
$$\Big(10 + 39\,\mu1 + 23\,\mu1^2 + 10\,\eta^2\,(1+\mu1) + 22\,\mu2 - 14\,\mu1\,\mu2 +$$
$$\eta\,\left(7 + 47\,\mu1 + 40\,\mu1^2 - 10\,\eta t\,(1+\mu1) - 12\,\mu1\,\mu2\right) +$$
$$\eta t\,(-7 - 7\,\mu1 + 12\,\mu1\,\mu2)\Big) + w^2\,(-1+\eta)^2$$
$$\Big(33 + 101\,\mu1 + 38\,\mu1^2 + 15\,\eta^3\,(1+\mu1) + 65\,\mu2 - 37\,\mu1\,\mu2 +$$
$$\eta t\,\left(-15 - 23\,\mu1 + 4\,\mu1^2 - 2\,\mu2 + 40\,\mu1\,\mu2\right) -$$
$$5\,\eta^2\,\left(3\,\eta t\,(1+\mu1) - 2 \times \left(4 + 10\,\mu1 + 6\,\mu1^2 - 3\,\mu1\,\mu2\right)\right) + \eta\,\Big(40 + 225\,\mu1 +$$
$$125\,\mu1^2 + 55\,\mu2 - 77\,\mu1\,\mu2 + 10\,\eta t\,(-4 - 4\,\mu1 + 3\,\mu1\,\mu2)\Big)\Big) - w$$
$$(-1+\eta) \times \Big(32 + 83\,\mu1 + 21\,\mu1^2 + 45\,\eta^3\,(1+\mu1) + 62\,\mu2 - 22\,\mu1\,\mu2 +$$
$$5\,\eta^2\,\left(10 + 55\,\mu1 + 27\,\mu1^2 - 9\,\eta t\,(1+\mu1) - 18\,\mu1\,\mu2\right) +$$
$$\eta t\,\left(-11 - 27\,\mu1 + 8\,\mu1^2 - 4\,\mu2 + 44\,\mu1\,\mu2\right) + \eta\,\Big(41 + 291\,\mu1 + 130\,\mu1^2 +$$
$$102\,\mu2 - 72\,\mu1\,\mu2 + 2\,\eta t\,\left(-25 + \mu1^2 + 6\,\mu1\,(-4 + 5\,\mu2)\right)\Big)\Big)\Big) +$$
$$\theta l\,\Big(-20 + 20\,\eta + 20\,\eta t - 20\,\eta\,\eta t + 34\,\theta p + 112\,\eta\,\theta p + 230\,\eta^2\,\theta p + 180$$
$$\eta^3\,\theta p - 70\,\eta t\,\theta p - 236\,\eta\,\eta t\,\theta p - 310\,\eta^2\,\eta t\,\theta p + 60\,\eta^3$$
$$\eta t\,\theta p - 52\,\mu1 - 28\,\eta\,\mu1 + 96\,\eta^2\,\mu1 - 16\,\eta^3\,\mu1 + 52\,\eta t$$
$$\mu1 + 28\,\eta\,\eta t\,\mu1 - 96\,\eta^2\,\eta t\,\mu1 + 16\,\eta^3\,\eta t\,\mu1 + 18\,\theta p$$
$$\mu1 - 170\,\eta\,\theta p\,\mu1 - 268\,\eta^2\,\theta p\,\mu1 + 220\,\eta^3\,\theta p\,\mu1 - 18$$
$$\eta t\,\theta p\,\mu1 + 90\,\eta\,\eta t\,\theta p\,\mu1 + 228\,\eta^2\,\eta t\,\theta p\,\mu1 - 100$$
$$\eta^3\,\eta t\,\theta p\,\mu1 + 28\,\mu1^2 - 12\,\eta\,\mu1^2 - 16\,\eta^3\,\mu1^2 - 28\,\eta t$$
$$\mu1^2 + 12\,\eta\,\eta t\,\mu1^2 + 16\,\eta^3\,\eta t\,\mu1^2 - 28\,\theta p\,\mu1^2 - 174$$
$$\eta\,\theta p\,\mu1^2 - 18\,\eta^2\,\theta p\,\mu1^2 + 400\,\eta^3\,\theta p\,\mu1^2 - 44\,\eta t\,\theta p$$
$$\mu1^2 - 34\,\eta\,\eta t\,\theta p\,\mu1^2 - 122\,\eta^2\,\eta t\,\theta p\,\mu1^2 + 20\,\eta^3\,\eta t\,\theta p$$
$$\mu1^2 - 5\,\mu2 + 5\,\eta\,\mu2 + 5\,\eta t\,\mu2 - 5\,\eta\,\eta t\,\mu2 + 14\,\theta p\,\mu2 + 6$$
$$\eta\,\theta p\,\mu2 + 22\,\eta^2\,\theta p\,\mu2 + 10\,\eta^3\,\theta p\,\mu2 - 14\,\eta t\,\theta p\,\mu2 - 6$$
$$\eta\,\eta t\,\theta p\,\mu2 - 22\,\eta^2\,\eta t\,\theta p\,\mu2 - 10\,\eta^3\,\eta t\,\theta p\,\mu2 + 19\,\mu1$$
$$\mu2 - 19\,\eta\,\mu1\,\mu2 - 19\,\eta t\,\mu1\,\mu2 + 19\,\eta\,\eta t\,\mu1\,\mu2 + 38\,\theta p$$
$$\mu1\,\mu2 + 186\,\eta\,\theta p\,\mu1\,\mu2 + 70\,\eta^2\,\theta p\,\mu1\,\mu2 - 50\,\eta^3\,\theta p$$
$$\mu1\,\mu2 - 38\,\eta t\,\theta p\,\mu1\,\mu2 - 186\,\eta\,\eta t\,\theta p\,\mu1\,\mu2 - 70\,\eta^2$$
$$\eta t\,\theta p\,\mu1\,\mu2 + 50\,\eta^3\,\eta t\,\theta p\,\mu1\,\mu2 + 4\,w^4\,(-1+\eta)^4\,\theta p$$
$$\left(5 - 2\,\mu1 - 7\,\mu1^2 + \eta\,\left(4 + 2\,\mu1 + 7\,\mu1^2\right) + 18\,\mu1\,\mu2 - 9\,\eta t\,(1 + 2\,\mu1\,\mu2)\right) - 5$$
$$\theta p\,\Phi1 + 5\,\eta\,\theta p\,\Phi1 + 5\,\eta t\,\theta p\,\Phi1 - 5\,\eta\,\eta t\,\theta p\,\Phi1 - 22\,\theta p\,\mu1$$
$$\Phi1 - 24\,\eta\,\theta p\,\mu1\,\Phi1 + 41\,\eta^2\,\theta p\,\mu1\,\Phi1 + 5\,\eta^3\,\theta p\,\mu1\,\Phi1 + 22$$
$$\eta t\,\theta p\,\mu1\,\Phi1 + 24\,\eta\,\eta t\,\theta p\,\mu1\,\Phi1 - 41\,\eta^2\,\eta t\,\theta p\,\mu1\,\Phi1 - 5$$
$$\eta^3\,\eta t\,\theta p\,\mu1\,\Phi1 - 5\,\theta p\,\mu1^2\,\Phi1 - 11\,\eta\,\theta p\,\mu1^2\,\Phi1 + 11\,\eta^2$$
$$\theta p\,\mu1^2\,\Phi1 + 5\,\eta^3\,\theta p\,\mu1^2\,\Phi1 + 5\,\eta t\,\theta p\,\mu1^2\,\Phi1 + 11\,\eta\,\eta t$$
$$\theta p\,\mu1^2\,\Phi1 - 11\,\eta^2\,\eta t\,\theta p\,\mu1^2\,\Phi1 - 5\,\eta^3\,\eta t\,\theta p\,\mu1^2\,\Phi1 - 5$$

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θp μ2 Φ1 + 5 η θp μ2 Φ1 + 5 ηt θp μ2 Φ1 - 5 η ηt θp μ2
Φ1 - 5 θp μ1 μ2 Φ1 + 5 η θp μ1 μ2 Φ1 + 5 ηt θp μ1 μ2
Φ1 - 5 η ηt θp μ1 μ2 Φ1 + 5 θp Φ2 - 5 η θp Φ2 - 5 ηt θp
Φ2 + 5 η ηt θp Φ2 + 14 θp μ1 Φ2 + 10 η θp μ1 Φ2 - 29 η^2
θp μ1 Φ2 + 5 η^3 θp μ1 Φ2 - 14 ηt θp μ1 Φ2 - 10 η ηt θp
μ1 Φ2 + 29 η^2 ηt θp μ1 Φ2 - 5 η^3 ηt θp μ1 Φ2 - 3 θp μ1^2
Φ2 - 3 η θp μ1^2 Φ2 + η^2 θp μ1^2 Φ2 + 5 η^3 θp μ1^2 Φ2 + 3
ηt θp μ1^2 Φ2 + 3 η ηt θp μ1^2 Φ2 - η^2 ηt θp μ1^2 Φ2 - 5
η^3 ηt θp μ1^2 Φ2 + 5 θp μ2 Φ2 - 5 η θp μ2 Φ2 - 5 ηt θp
μ2 Φ2 + 5 η ηt θp μ2 Φ2 + 17 θp μ1 μ2 Φ2 + 43 η θp μ1
μ2 Φ2 - 60 η^2 θp μ1 μ2 Φ2 - 17 ηt θp μ1 μ2 Φ2 - 43 η
ηt θp μ1 μ2 Φ2 + 60 η^2 ηt θp μ1 μ2 Φ2 - w^3 (-1 + η)^3
(-20 + 100 θp - 52 μ1 - 56 θp μ1 + 28 μ1^2 - 156 θp μ1^2 +
   40 η^2 θp (4 + 2 μ1 + 7 μ1^2) - 5 μ2 + 16 θp μ2 + 19 μ1 μ2 +
   280 θp μ1 μ2 - 5 θp Φ1 - 11 θp μ1 Φ1 - 5 θp μ2 Φ1 -
   5 θp μ1 μ2 Φ1 + 5 θp Φ2 + 11 θp μ1 Φ2 + 5 θp μ2 Φ2 +
   5 θp μ1 μ2 Φ2 - ηt (28 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2) +
      θp (216 + 56 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (16 - 5 Φ1 + 5 Φ2) +
         μ1 (-16 - 11 Φ1 - 5 μ2 (-56 + Φ1 - Φ2) + 11 Φ2))) +
   η (20 + 52 μ1 - 28 μ1^2 + 5 μ2 - 19 μ1 μ2 + θp (196 - 96 μ1^2 + 5 Φ1 +
         μ1 (-116 + 11 Φ1 + 5 μ2 (36 + Φ1 - Φ2) - 11 Φ2) + μ2 (36 + 5 Φ1 -
            5 Φ2) - 5 Φ2) + ηt (28 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2) +
         θp (28 μ1^2 - 5 × (48 + Φ1 - Φ2) + μ2 (-36 - 5 Φ1 + 5 Φ2) +
            μ1 (76 - 11 Φ1 - 5 μ2 (36 + Φ1 - Φ2) + 11 Φ2)))))) + w^2
(-1 + η)^2 (-60 + 174 θp - 156 μ1 - 82 θp μ1 + 84 μ1^2 - 244 θp μ1^2 +
   60 η^3 θp (4 + 2 μ1 + 7 μ1^2) - 15 μ2 + 42 θp μ2 + 57 μ1 μ2 +
   402 θp μ1 μ2 - 15 θp Φ1 - 44 θp μ1 Φ1 - 5 θp μ1^2 Φ1 -
   15 θp μ2 Φ1 - 15 θp μ1 μ2 Φ1 + ηt (60 + 156 μ1 - 84 μ1^2 + 15 μ2 -
      57 μ1 μ2 + θp (-394 + 15 Φ1 + μ1^2 (5 Φ1 + 3 × (-56 + Φ2)) +
         μ1 (26 + 44 Φ1 + 3 μ2 (-134 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
         3 μ2 (-14 + 5 Φ1 - 5 Φ2) - 15 Φ2)) + 15 θp Φ2 +
   36 θp μ1 Φ2 - 3 θp μ1^2 Φ2 + 15 θp μ2 Φ2 + 27 θp μ1 μ2 Φ2 +
   η^2 (16 × (-1 + ηt) × (-5 + μ1) μ1 - 5 θp (-2 × (53 + 5 μ2) -
         μ1^2 (92 + 3 Φ1 + Φ2) + μ1 (6 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2)) +
         ηt (58 + 10 μ2 + μ1^2 (8 + 3 Φ1 + Φ2) -
            μ1 (30 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2))))) +
   η (60 + 76 μ1 - 68 μ1^2 + 15 μ2 - 57 μ1 μ2 - θp (-416 - 15 Φ1 +
         15 Φ2 + 2 μ1^2 (226 + 5 Φ1 + Φ2) + μ2 (-64 - 15 Φ1 + 15 Φ2) +
         μ1 (444 + Φ1 + 11 Φ2 - μ2 (616 + 15 Φ1 + 33 Φ2))) +
      ηt (68 μ1^2 - 15 × (4 + μ2) + 19 μ1 (-4 + 3 μ2) + θp (-676 - 15 Φ1 +
            15 Φ2 + 2 μ1^2 (12 + 5 Φ1 + Φ2) + μ2 (-64 - 15 Φ1 + 15 Φ2) +
            μ1 (260 + Φ1 + 11 Φ2 - μ2 (616 + 15 Φ1 + 33 Φ2)))))) + w
(-1 + η) × (60 - 136 θp + 156 μ1 + 8 θp μ1 - 84 μ1^2 + 144 θp μ1^2 +
   15 μ2 - 40 θp μ2 - 57 μ1 μ2 - 232 θp μ1 μ2 +
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3 ηt (28 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) + 15 θp Φ1 +
55 θp μ1 Φ1 + 10 θp μ1^2 Φ1 + 15 θp μ2 Φ1 + 15 θp μ1 μ2 Φ1 -
15 θp Φ2 - 39 θp μ1 Φ2 + 6 θp μ1^2 Φ2 - 15 θp μ2 Φ2 - 39 θp μ1 μ2 Φ2 +
ηt θp (292 - 15 Φ1 - 5 μ2 (-8 + 3 Φ1 - 3 Φ2) + 15 Φ2 - 2 μ1^2 (-78 + 5 Φ1 +
      3 Φ2) + μ1 (16 - 55 Φ1 + 39 Φ2 + μ2 (232 - 15 Φ1 + 39 Φ2))) +
2 η^2 (-1 + ηt) × (-8 × (-11 + μ1) μ1 + θp (270 + 36 μ2 + 43 μ1 Φ1 +
      μ1^2 (81 + 13 Φ1 + 3 Φ2) - 3 μ1 (73 + (9 + 20 μ2) Φ2))) +
η^3 (-16 × (-1 + ηt) μ1 (1 + μ1) + 5 θp (-96 + 2 × (-1 + ηt) μ2 -
      μ1 (80 - 10 μ2 + Φ1 + ηt (-32 + 10 μ2 - Φ1 - Φ2) + Φ2) +
      μ1^2 (-164 - Φ1 - Φ2 + ηt (-4 + Φ1 + Φ2)))) +
η (-60 + 4 μ1 + 52 μ1^2 - 15 μ2 + 57 μ1 μ2 + θp (-5 × (68 + 3 Φ1 - 3 Φ2) +
      μ1^2 (502 + 21 Φ1 + 5 Φ2) + μ2 (-34 - 15 Φ1 + 15 Φ2) -
      μ1 (-498 - 36 Φ1 + 10 Φ2 + μ2 (622 + 15 Φ1 + 81 Φ2))) +
   ηt (60 - 4 μ1 - 52 μ1^2 + 15 μ2 - 57 μ1 μ2 + θp (664 + 15 Φ1 +
         μ2 (34 + 15 Φ1 - 15 Φ2) + μ1^2 (38 - 21 Φ1 - 5 Φ2) - 15 Φ2 +
         μ1 (-282 - 36 Φ1 + 10 Φ2 + μ2 (622 + 15 Φ1 + 81 Φ2)))))))) -
x^3 (-1 + η)^3 (4 (-1 + w (-1 + η))^3 (-1 - 6 η - 6 η^2 + w (-2 - η + 3 η^2)) ×
   (-1 + ηt) θl^2 (5 - 2 μ1 + 11 μ1^2) +
  (-1 + η)^2 θp (20 + 104 η + 36 η^2 + 80 η^4 - 20 ηt - 16 η ηt - 80
     η^2 ηt - 80 η^3 ηt + 16 μ1 + 168 η μ1 + 456 η^2 μ1 + 440
     η^3 μ1 + 80 η^4 μ1 - 48 ηt μ1 - 80 η ηt μ1 - 64 η^2 ηt
     μ1 - 80 η^3 ηt μ1 - 4 μ1^2 + 16 η μ1^2 + 180 η^2 μ1^2 + 200
     η^3 μ1^2 + 44 ηt μ1^2 + 32 η ηt μ1^2 + 16 η^2 ηt μ1^2 + 12
     μ2 + 152 η μ2 + 196 η^2 μ2 - 9 ηt μ2 - 16 η ηt μ2 + 12 μ1
     μ2 + 8 η μ1 μ2 - 116 η^2 μ1 μ2 - 240 η^3 μ1 μ2 + 39 ηt μ1
     μ2 + 128 η ηt μ1 μ2 + 120 η^2 ηt μ1 μ2 + 2 w^4 (-1 + η)^4
     (5 + 12 μ1 + 7 μ1^2 + 4 η^2 (1 + μ1) + 11 μ2 - 7 μ1 μ2 +
       2 η (1 + 9 μ1 + 8 μ1^2 - 2 ηt (1 + μ1) - 3 μ1 μ2) +
       ηt (-2 - 2 μ1 + 6 μ1 μ2)) - w^3 (-1 + η)^3
     (60 + 40 μ1^2 + 44 ηt μ1^2 + 40 η^3 (1 + μ1) + 4 μ1 (31 - 14 μ2) +
       112 μ2 - 9 ηt (4 + μ2) + ηt μ1 (-64 + 87 μ2) +
       8 η^2 (7 + 27 μ1 + 20 μ1^2 - 5 ηt (1 + μ1) - 12 μ1 μ2) + 4 η
        (24 + 82 μ1 + 46 μ1^2 + 44 μ2 - 43 μ1 μ2 + 2 ηt (-7 - 7 μ1 + 12 μ1 μ2))) +
    w^2 (-1 + η)^2 (40 η^4 (1 + μ1) + 2 × (51 + 92 μ1 + 17 μ1^2 + 83 μ2 - 19 μ1 μ2) -
       40 η^3 (-4 + ηt - 8 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
       ηt (-80 - 164 μ1 + 132 μ1^2 - 27 μ2 + 177 μ1 μ2) +
       4 η^2 (55 + 240 μ1 + 125 μ1^2 + 55 μ2 - 119 μ1 μ2 +
          10 ηt (-4 - 4 μ1 + 3 μ1 μ2)) + 4 η (71 + 207 μ1 + 76 μ1^2 + 130 μ2 -
          98 μ1 μ2 + ηt (-30 - 46 μ1 + 8 μ1^2 - 4 μ2 + 80 μ1 μ2))) - w (-1 + η) ×
     (120 η^4 (1 + μ1) + 40 η^3 (5 + 9 μ1^2 - 3 ηt (1 + μ1) + μ1 (20 - 9 μ2)) +
       4 × (18 + μ1^2 + 22 μ2 + μ1 (25 + 4 μ2)) +
       ηt (-68 + 132 μ1^2 - 27 μ2 + μ1 (-152 + 141 μ2)) +
       8 η^2 (26 + 65 μ1^2 + μ1 (151 - 62 μ2) + 52 μ2 +
          ηt (-25 + 2 μ1^2 + μ1 (-23 + 30 μ2))) + 8 η (33 + 21 μ1^2 - 28 μ1
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$$(-3+\mu 2)+62\,\mu 2+\eta t\left(-11+8\,\mu 1^2-4\,\mu 2+\mu 1\,(-27+44\,\mu 2)\right)\Big)\Big)\Big)+$$

$$\theta l\Big(-30-30\,\eta+60\,\eta^2+30\,\eta t+30\,\eta\,\eta t-60\,\eta^2\,\eta t+30\,\theta p+126\,\eta$$
$$\theta p+268\,\eta^2\,\theta p+420\,\eta^3\,\theta p+240\,\eta^4\,\theta p-70\,\eta t\,\theta p-230$$
$$\eta\,\eta t\,\theta p-444\,\eta^2\,\eta t\,\theta p-420\,\eta^3\,\eta t\,\theta p+80\,\eta^4\,\eta t\,\theta p-32$$
$$\mu 1-128\,\eta\,\mu 1+40\,\eta^2\,\mu 1+144\,\eta^3\,\mu 1-24\,\eta^4\,\mu 1+32$$
$$\eta t\,\mu 1+128\,\eta\,\eta t\,\mu 1-40\,\eta^2\,\eta t\,\mu 1-144\,\eta^3\,\eta t\,\mu 1+24$$
$$\eta^4\,\eta t\,\mu 1+34\,\theta p\,\mu 1+56\,\eta\,\theta p\,\mu 1-342\,\eta^2\,\theta p\,\mu 1-272$$
$$\eta^3\,\theta p\,\mu 1+300\,\eta^4\,\theta p\,\mu 1-18\,\eta t\,\theta p\,\mu 1-72\,\eta\,\eta t\,\theta p$$
$$\mu 1+182\,\eta^2\,\eta t\,\theta p\,\mu 1+272\,\eta^3\,\eta t\,\theta p\,\mu 1-140\,\eta^4\,\eta t$$
$$\theta p\,\mu 1+10\,\mu 1^2+46\,\eta\,\mu 1^2-32\,\eta^2\,\mu 1^2-24\,\eta^4\,\mu 1^2-10$$
$$\eta t\,\mu 1^2-46\,\eta\,\eta t\,\mu 1^2+32\,\eta^2\,\eta t\,\mu 1^2+24\,\eta^4\,\eta t\,\mu 1^2-8$$
$$\theta p\,\mu 1^2-106\,\eta\,\theta p\,\mu 1^2-298\,\eta^2\,\theta p\,\mu 1^2+148\,\eta^3\,\theta p$$
$$\mu 1^2+540\,\eta^4\,\theta p\,\mu 1^2-80\,\eta t\,\theta p\,\mu 1^2-94\,\eta\,\eta t\,\theta p\,\mu 1^2+26$$
$$\eta^2\,\eta t\,\theta p\,\mu 1^2-148\,\eta^3\,\eta t\,\theta p\,\mu 1^2+20\,\eta^4\,\eta t\,\theta p\,\mu 1^2-10$$
$$\mu 2-5\,\eta\,\mu 2+15\,\eta^2\,\mu 2+10\,\eta t\,\mu 2+5\,\eta\,\eta t\,\mu 2-15\,\eta^2$$
$$\eta t\,\mu 2+22\,\theta p\,\mu 2+36\,\eta\,\theta p\,\mu 2+2\,\eta^2\,\theta p\,\mu 2+48\,\eta^3\,\theta p$$
$$\mu 2+20\,\eta^4\,\theta p\,\mu 2-22\,\eta t\,\theta p\,\mu 2-36\,\eta\,\eta t\,\theta p\,\mu 2-2\,\eta^2$$
$$\eta t\,\theta p\,\mu 2-48\,\eta^3\,\eta t\,\theta p\,\mu 2-20\,\eta^4\,\eta t\,\theta p\,\mu 2+38\,\mu 1$$
$$\mu 2+19\,\eta\,\mu 1\,\mu 2-57\,\eta^2\,\mu 1\,\mu 2-38\,\eta t\,\mu 1\,\mu 2-19\,\eta$$
$$\eta t\,\mu 1\,\mu 2+57\,\eta^2\,\eta t\,\mu 1\,\mu 2-2\,\theta p\,\mu 1\,\mu 2+216\,\eta\,\theta p\,\mu 1$$
$$\mu 2+494\,\eta^2\,\theta p\,\mu 1\,\mu 2+120\,\eta^3\,\theta p\,\mu 1\,\mu 2-100\,\eta^4\,\theta p\,\mu 1$$
$$\mu 2+2\,\eta t\,\theta p\,\mu 1\,\mu 2-216\,\eta\,\eta t\,\theta p\,\mu 1\,\mu 2-494\,\eta^2\,\eta t\,\theta p$$
$$\mu 1\,\mu 2-120\,\eta^3\,\eta t\,\theta p\,\mu 1\,\mu 2+100\,\eta^4\,\eta t\,\theta p\,\mu 1\,\mu 2+w^4$$
$$(-1+\eta)^4\Big(-10+40\,\theta p-20\,\mu 1-16\,\theta p\,\mu 1+26\,\mu 1^2-$$
$$56\,\theta p\,\mu 1^2+16\,\eta^2\,\theta p\left(4+2\,\mu 1+7\,\mu 1^2\right)+5\,\mu 2+$$
$$5\,\mu 1\,\mu 2+144\,\theta p\,\mu 1\,\mu 2-\eta t\Big(26\,\mu 1^2+5\,\mu 1\,(-4+\mu 2)+$$
$$5\times(-2+\mu 2)+4\,\theta p\left(23+11\,\mu 1^2+\mu 1\,(-2+36\,\mu 2)\right)\Big)+$$
$$\eta\Big(10+20\,\mu 1-26\,\mu 1^2-8\,\theta p\left(-14+7\,\mu 1^2+\mu 1\,(2-36\,\mu 2)\right)-$$
$$5\,\mu 2-5\,\mu 1\,\mu 2+\eta t\Big(26\,\mu 1^2+5\,\mu 1\,(-4+\mu 2)+5\times(-2+\mu 2)+$$
$$4\,\theta p\left(-31+11\,\mu 1^2-2\,\mu 1\,(1+36\,\mu 2)\right)\Big)\Big)\Big)-10\,\theta p$$
$$\Phi 1-10\,\eta\,\theta p\,\Phi 1+20\,\eta^2\,\theta p\,\Phi 1+10\,\eta t\,\theta p\,\Phi 1+10\,\eta\,\eta t\,\theta p\,\Phi 1-20$$
$$\eta^2\,\eta t\,\theta p\,\Phi 1-17\,\theta p\,\mu 1\,\Phi 1-70\,\eta\,\theta p\,\mu 1\,\Phi 1-7\,\eta^2\,\theta p$$
$$\mu 1\,\Phi 1+84\,\eta^3\,\theta p\,\mu 1\,\Phi 1+10\,\eta^4\,\theta p\,\mu 1\,\Phi 1+17\,\eta t\,\theta p\,\mu 1$$
$$\Phi 1+70\,\eta\,\eta t\,\theta p\,\mu 1\,\Phi 1+7\,\eta^2\,\eta t\,\theta p\,\mu 1\,\Phi 1-84\,\eta^3\,\eta t\,\theta p$$
$$\mu 1\,\Phi 1-10\,\eta^4\,\eta t\,\theta p\,\mu 1\,\Phi 1-\theta p\,\mu 1^2\,\Phi 1-18\,\eta\,\theta p\,\mu 1^2$$
$$\Phi 1-15\,\eta^2\,\theta p\,\mu 1^2\,\Phi 1+24\,\eta^3\,\theta p\,\mu 1^2\,\Phi 1+10\,\eta^4\,\theta p\,\mu 1^2$$
$$\Phi 1+\eta t\,\theta p\,\mu 1^2\,\Phi 1+18\,\eta\,\eta t\,\theta p\,\mu 1^2\,\Phi 1+15\,\eta^2\,\eta t\,\theta p\,\mu 1^2$$
$$\Phi 1-24\,\eta^3\,\eta t\,\theta p\,\mu 1^2\,\Phi 1-10\,\eta^4\,\eta t\,\theta p\,\mu 1^2\,\Phi 1-10\,\theta p$$
$$\mu 2\,\Phi 1-10\,\eta\,\theta p\,\mu 2\,\Phi 1+20\,\eta^2\,\theta p\,\mu 2\,\Phi 1+10\,\eta t\,\theta p\,\mu 2$$
$$\Phi 1+10\,\eta\,\eta t\,\theta p\,\mu 2\,\Phi 1-20\,\eta^2\,\eta t\,\theta p\,\mu 2\,\Phi 1-10\,\theta p\,\mu 1\,\mu 2$$
$$\Phi 1-10\,\eta\,\theta p\,\mu 1\,\mu 2\,\Phi 1+20\,\eta^2\,\theta p\,\mu 1\,\mu 2\,\Phi 1+10\,\eta t\,\theta p\,\mu 1$$
$$\mu 2\,\Phi 1+10\,\eta\,\eta t\,\theta p\,\mu 1\,\mu 2\,\Phi 1-20\,\eta^2\,\eta t\,\theta p\,\mu 1\,\mu 2\,\Phi 1+10$$
$$\theta p\,\Phi 2+10\,\eta\,\theta p\,\Phi 2-20\,\eta^2\,\theta p\,\Phi 2-10\,\eta t\,\theta p\,\Phi 2-10\,\eta\,\eta t$$
$$\theta p\,\Phi 2+20\,\eta^2\,\eta t\,\theta p\,\Phi 2+13\,\theta p\,\mu 1\,\Phi 2+44\,\eta\,\theta p\,\mu 1\,\Phi 2-11$$
$$\eta^2\,\theta p\,\mu 1\,\Phi 2-56\,\eta^3\,\theta p\,\mu 1\,\Phi 2+10\,\eta^4\,\theta p\,\mu 1\,\Phi 2-13\,\eta t$$
$$\theta p\,\mu 1\,\Phi 2-44\,\eta\,\eta t\,\theta p\,\mu 1\,\Phi 2+11\,\eta^2\,\eta t\,\theta p\,\mu 1\,\Phi 2+56$$

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η^3 ηt θp μ1 Φ2 - 10 η^4 ηt θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 8 η
θp μ1^2 Φ2 - 3 η^2 θp μ1^2 Φ2 + 4 η^3 θp μ1^2 Φ2 + 10 η^4 θp
μ1^2 Φ2 + 3 ηt θp μ1^2 Φ2 + 8 η ηt θp μ1^2 Φ2 + 3 η^2 ηt θp
μ1^2 Φ2 - 4 η^3 ηt θp μ1^2 Φ2 - 10 η^4 ηt θp μ1^2 Φ2 + 10 θp
μ2 Φ2 + 10 η θp μ2 Φ2 - 20 η^2 θp μ2 Φ2 - 10 ηt θp μ2
Φ2 - 10 η ηt θp μ2 Φ2 + 20 η^2 ηt θp μ2 Φ2 - 2 θp μ1 μ2
Φ2 + 70 η θp μ1 μ2 Φ2 + 52 η^2 θp μ1 μ2 Φ2 - 120 η^3 θp μ1
μ2 Φ2 + 2 ηt θp μ1 μ2 Φ2 - 70 η ηt θp μ1 μ2 Φ2 - 52 η^2
ηt θp μ1 μ2 Φ2 + 120 η^3 ηt θp μ1 μ2 Φ2 - w^3 (-1 + η)^3
(-60 + 140 θp - 128 μ1 - 16 θp μ1 + 76 μ1^2 - 156 θp μ1^2 +
   80 η^3 θp (4 + 2 μ1 + 7 μ1^2) + 5 μ2 + 8 θp μ2 + 53 μ1 μ2 +
   464 θp μ1 μ2 - 10 θp Φ1 - 22 θp μ1 Φ1 - 10 θp μ2 Φ1 -
   10 θp μ1 μ2 Φ1 + 10 θp Φ2 + 22 θp μ1 Φ2 + 10 θp μ2 Φ2 +
   10 θp μ1 μ2 Φ2 - ηt (-60 - 128 μ1 + 76 μ1^2 + 5 μ2 + 53 μ1 μ2 +
      2 θp (168 + 116 μ1^2 - 5 Φ1 + 5 Φ2 + μ2 (4 - 5 Φ1 + 5 Φ2) +
         μ1 (-4 - 11 Φ1 + 11 Φ2 + μ2 (232 - 5 Φ1 + 5 Φ2)))) +
   2 η (2 × (-1 + ηt) × (4 μ1^2 - μ1 (-7 + μ2) + 5 μ2) + θp
         (248 - 232 μ1^2 + 28 μ2 - 5 Φ1 - 5 μ2 Φ1 + ηt (-382 + 2 μ1^2 +
               5 Φ1 + μ1 (16 + 11 Φ1 + 5 μ2 (-116 + Φ1 - Φ2) - 11 Φ2) +
               μ2 (-28 + 5 Φ1 - 5 Φ2) - 5 Φ2) + 5 Φ2 + 5 μ2 Φ2 +
         μ1 (-92 - 11 Φ1 + 11 Φ2 + μ2 (580 - 5 Φ1 + 5 Φ2)))) +
   η^2 (60 + 156 μ1 - 60 μ1^2 + 15 μ2 - 57 μ1 μ2 + 4 θp (146 + 34 μ1^2 +
         5 Φ1 + μ1 (-36 + 11 Φ1 + 5 μ2 (20 + Φ1 - Φ2) - 11 Φ2) +
         μ2 (16 + 5 Φ1 - 5 Φ2) - 5 Φ2) +
      ηt (3 × (20 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
         4 θp (38 μ1^2 - 5 × (22 + Φ1 - Φ2) + μ2 (-16 - 5 Φ1 + 5 Φ2) +
            μ1 (36 - 11 Φ1 - 5 μ2 (20 + Φ1 - Φ2) + 11 Φ2)))) +
w^2 (-1 + η)^2 (-120 + 120 ηt + 198 θp - 474 ηt θp - 228 μ1 +
   228 ηt μ1 + 58 θp μ1 - 34 ηt θp μ1 + 84 μ1^2 - 84 ηt μ1^2 -
   152 θp μ1^2 - 412 ηt θp μ1^2 + 80 η^4 θp (4 + 2 μ1 + 7 μ1^2) -
   15 μ2 + 15 ηt μ2 + 42 θp μ2 - 42 ηt θp μ2 + 129 μ1 μ2 -
   129 ηt μ1 μ2 + 474 θp μ1 μ2 - 474 ηt θp μ1 μ2 - 30 θp Φ1 +
   30 ηt θp Φ1 - 61 θp μ1 Φ1 + 61 ηt θp μ1 Φ1 - θp μ1^2 Φ1 +
   ηt θp μ1^2 Φ1 - 30 θp μ2 Φ1 + 30 ηt θp μ2 Φ1 - 30 θp μ1 μ2 Φ1 +
   30 ηt θp μ1 μ2 Φ1 + 30 θp Φ2 - 30 ηt θp Φ2 + 57 θp μ1 Φ2 -
   57 ηt θp μ1 Φ2 - 3 θp μ1^2 Φ2 + 3 ηt θp μ1^2 Φ2 + 30 θp μ2 Φ2 -
   30 ηt θp μ2 Φ2 + 18 θp μ1 μ2 Φ2 - 18 ηt θp μ1 μ2 Φ2 +
   η (96 μ1^2 - 30 × (2 + μ2) + 6 μ1 (-40 + 7 μ2) - θp μ1^2 (820 + 19 Φ1 +
         9 Φ2) + 6 θp (129 - 5 Φ1 + 5 Φ2 + μ2 (21 - 5 Φ1 + 5 Φ2)) +
      θp μ1 (-322 - 115 Φ1 + 87 Φ2 + μ2 (1782 - 30 Φ1 + 90 Φ2)) + ηt
         (6 × (-16 μ1^2 + μ1 (40 - 7 μ2) + 5 × (2 + μ2)) + θp (-1378 + 30 Φ1 +
               μ1 (74 + 115 Φ1 + 6 μ2 (-297 + 5 Φ1 - 15 Φ2) - 87 Φ2) + 6 μ2
                (-21 + 5 Φ1 - 5 Φ2) - 30 Φ2 + μ1^2 (-264 + 19 Φ1 + 9 Φ2)))) -
   2 η^3 (-12 × (-1 + ηt) × (-5 + μ1) μ1 + 5 θp (-2 × (53 + 5 μ2) -
         μ1^2 (116 + 3 Φ1 + Φ2) + μ1 (-18 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2)) +
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                    ηt (42 + 10 μ2 + μ1^2 (4 + 3 Φ1 + Φ2) -
                        μ1 (14 - 9 Φ1 + 5 Φ2 + 2 μ2 (7 + 6 Φ2)))))) +
                η^2 (3 × (-52 μ1^2 + μ1 (116 - 57 μ2) + 15 × (4 + μ2)) - 2 θp
                    (-6 × (97 + 5 Φ1 - 5 Φ2) + μ1^2 (184 + 5 Φ1 - Φ2) +
                        μ2 (-58 - 30 Φ1 + 30 Φ2) - μ1 (-358 + 43 Φ1 - 47 Φ2 +
                            μ2 (682 + 30 Φ1 + 6 Φ2))) + ηt (3 × (52 μ1^2 -
                            15 × (4 + μ2) + μ1 (-116 + 57 μ2)) + 2 θp (-622 - 30 Φ1 +
                            μ1^2 (168 + 5 Φ1 - Φ2) + 30 Φ2 + μ2 (-58 - 30 Φ1 + 30 Φ2) -
                            μ1 (-230 + 43 Φ1 - 47 Φ2 + μ2 (682 + 30 Φ1 + 6 Φ2)))))) + w
            (-1 + η) × (100 - 100 ηt - 128 θp + 300 ηt θp + 152 μ1 - 152 ηt μ1 -
                92 θp μ1 + 52 ηt θp μ1 - 44 μ1^2 + 44 ηt μ1^2 + 60 θp μ1^2 +
                304 ηt θp μ1^2 + 25 μ2 - 25 ηt μ2 - 56 θp μ2 + 56 ηt θp μ2 -
                119 μ1 μ2 + 119 ηt μ1 μ2 - 152 θp μ1 μ2 + 152 ηt θp μ1 μ2 +
                30 θp Φ1 - 30 ηt θp Φ1 + 56 θp μ1 Φ1 - 56 ηt θp μ1 Φ1 +
                2 θp μ1^2 Φ1 - 2 ηt θp μ1^2 Φ1 + 30 θp μ2 Φ1 - 30 ηt θp μ2 Φ1 +
                30 θp μ1 μ2 Φ1 - 30 ηt θp μ1 μ2 Φ1 - 30 θp Φ2 + 30 ηt θp Φ2 -
                48 θp μ1 Φ2 + 48 ηt θp μ1 Φ2 + 6 θp μ1^2 Φ2 - 6 ηt θp μ1^2 Φ2 -
                30 θp μ2 Φ2 + 30 ηt θp μ2 Φ2 - 6 θp μ1 μ2 Φ2 + 6 ηt θp μ1 μ2 Φ2 +
                2 η^4 (-12 × (-1 + ηt) μ1 (1 + μ1) + 5 θp (-64 + 2 × (-1 + ηt) μ2 -
                        μ1 (54 - 10 μ2 + Φ1 + ηt (-22 + 10 μ2 - Φ1 - Φ2) + Φ2) +
                        μ1^2 (-110 - Φ1 - Φ2 + ηt (-2 + Φ1 + Φ2)))) +
                2 η^3 (-12 × (-1 + ηt) × (-11 + μ1) μ1 + θp (-540 - 74 μ2 -
                        μ1^2 (374 + 27 Φ1 + 7 Φ2) + μ1 (166 + 10 μ2 - 87 Φ1 + 53 Φ2 +
                            120 μ2 Φ2) + ηt (380 + 74 μ2 + μ1^2 (94 + 27 Φ1 + 7 Φ2) -
                            μ1 (246 + 10 μ2 - 87 Φ1 + 53 Φ2 + 120 μ2 Φ2)))) +
                η^2 (-180 - 232 μ1 + 128 μ1^2 - 45 μ2 + 171 μ1 μ2 + θp
                    (-6 μ2 (9 + 10 Φ1 - 10 Φ2) - 20 × (44 + 3 Φ1 - 3 Φ2) +
                        μ1^2 (690 + 25 Φ1 + Φ2) - μ1 (-914 + 35 Φ1 - 61 Φ2 +
                            6 μ2 (243 + 10 Φ1 + 14 Φ2))) + ηt (-128 μ1^2 +
                        μ1 (232 - 171 μ2) + 45 × (4 + μ2) + θp (1216 + 60 Φ1 +
                            6 μ2 (9 + 10 Φ1 - 10 Φ2) - 60 Φ2 - μ1^2 (210 + 25 Φ1 + Φ2) +
                            μ1 (-530 + 35 Φ1 - 61 Φ2 + 6 μ2 (243 + 10 Φ1 + 14 Φ2)))))) +
                η (4 × (-33 μ1^2 + μ1 (80 - 13 μ2) + 5 × (4 + μ2)) + θp (-548 +
                        30 Φ1 + μ1 (66 + 163 Φ1 + 2 μ2 (-563 + 15 Φ1 - 75 Φ2) - 109 Φ2) +
                        2 μ2 (-53 + 15 Φ1 - 15 Φ2) - 30 Φ2 + μ1^2 (518 + 37 Φ1 + 17 Φ2)) +
                    ηt (4 × (33 μ1^2 - 5 × (4 + μ2) + μ1 (-80 + 13 μ2)) +
                        θp (1000 - 30 Φ1 + μ1^2 (318 - 37 Φ1 - 17 Φ2) + 30 Φ2 +
                            μ2 (106 - 30 Φ1 + 30 Φ2) + μ1 (70 - 163 Φ1 + 109 Φ2 +
                                μ2 (1126 - 30 Φ1 + 150 Φ2)))))))))) /
(96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
  (w +
    x +
    η -
    w
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η - x
η)^3 (-1 + ηt) θp))

βΦ1 =
 -((cv cσ (x (-1 + η) - η) (-1 + η) (1 + x + η - x η)^2 ((x + η - x η)^4 (-1 + ηt) θl θp (2 x (-1 +
            η) × (1 + μ1 - 32 μ2 + 7 Φ1 + 7 μ1 Φ1) - 2 η (1 + μ1 - 32 μ2 + 7 Φ1 + 7 μ1 Φ1) -
          (11 + 8 μ2 + 5 Φ1 + μ1 (11 + 5 Φ1)) × (2 + Φ1 + Φ2)) - w (x (-1 + η) - η) (-1 + η) ×
        (4 x^4 (-1 + η)^4 θp (29 - 30 θl + 29 μ1 - 30 θl μ1 + 72 μ2 - 40 θl μ2 + Φ1 - 8 θl Φ1 +
            7 μ1 Φ1 - 14 θl μ1 Φ1 + 4 θl μ2 Φ1 + 3 η^2 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - η
             (56 + 56 μ1 + 156 μ2 + 4 Φ1 + 10 μ1 Φ1 - 2 θl (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
               ηt (1 + 2 θl) × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + ηt (9 + 28 μ2 + Φ1 +
               μ1 (9 + Φ1) + 2 θl (15 + 20 μ2 + 4 Φ1 - 2 μ2 Φ1 + μ1 (15 + 7 Φ1)))) -
          x^3 (-1 + η)^3 θp (48 η^3 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - 16 η^2 (56 + 56 μ1 + 156 μ2 +
               4 Φ1 + 10 μ1 Φ1 - 2 θl (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + ηt (1 + 2 θl) ×
                (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 16 η (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 -
               2 θl (15 - 2 μ2 (-10 + Φ1) + 4 Φ1 + μ1 (15 + 7 Φ1)) + ηt (9 + 28 μ2 + Φ1 +
                  μ1 (9 + Φ1) + 2 θl (15 + 20 μ2 + 4 Φ1 - 2 μ2 Φ1 + μ1 (15 + 7 Φ1)))) +
            3 × (-1 + ηt) θl (24 + 35 Φ1 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 Φ2 + 8 μ2
                 (-6 + Φ1 + Φ2) + μ1 (24 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 (7 + Φ2)))) -
          x (-1 + η) × (48 η^5 θp (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 4 ηt θp
             (19 + 40 μ2 + 5 Φ1 + μ1 (19 + 5 Φ1)) - 16 η^4 θp
             (56 + 56 μ1 + 156 μ2 + 4 Φ1 + 10 μ1 Φ1 - 2 θl (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
               ηt (1 + 2 θl) × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 16 η^3 θp
             (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 - 2 θl (15 - 2 μ2 (-10 + Φ1) +
                 4 Φ1 + μ1 (15 + 7 Φ1)) + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1) +
                 2 θl (15 + 20 μ2 + 4 Φ1 - 2 μ2 Φ1 + μ1 (15 + 7 Φ1)))) + 9
             η^2 (-1 + ηt) θl θp (24 + 35 Φ1 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 Φ2 +
               8 μ2 (-6 + Φ1 + Φ2) + μ1 (24 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 (7 + Φ2))) + 4
             η (-ηt θp (19 + 40 μ2 + 5 Φ1 + μ1 (19 + 5 Φ1)) + (-1 + ηt) θl
                 (-3 - 3 μ1 + 8 μ2 - 5 Φ1 - 5 μ1 Φ1 + 2 θp (22 + 21 Φ1 + 5 Φ1^2 + 6 Φ2 + 4 μ2
                      (6 + 3 Φ1 + 2 Φ2) + μ1 (22 + 5 Φ1^2 + 6 Φ2 + 3 Φ1 (7 + 2 Φ2))))) +
          η θp (12 η^5 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 4 ηt (7 + 4 μ2 + 5 Φ1 +
               μ1 (7 + 5 Φ1)) - 4 η^4 (56 + 56 μ1 + 156 μ2 + 4 Φ1 + 10 μ1 Φ1 -
               2 θl (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + ηt (1 + 2 θl) ×
                (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 4 η^3 (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 -
               2 θl (15 - 2 μ2 (-10 + Φ1) + 4 Φ1 + μ1 (15 + 7 Φ1)) + ηt (9 + 28 μ2 + Φ1 +
                  μ1 (9 + Φ1) + 2 θl (15 + 20 μ2 + 4 Φ1 - 2 μ2 Φ1 + μ1 (15 + 7 Φ1)))) + 3
             η^2 (-1 + ηt) θl (24 + 35 Φ1 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 Φ2 + 8 μ2 (-6 + Φ1 + Φ2) +
               μ1 (24 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 (7 + Φ2))) + 4 η (-θl (18 + 19 Φ1 + 5 Φ1^2 +
                 4 Φ2 + 2 μ2 (6 + 3 Φ1 + Φ2) + μ1 (18 + 5 Φ1^2 + 4 Φ2 + Φ1 (19 + 6 Φ2))) +
               ηt (-7 - 7 μ1 - 4 μ2 - 5 Φ1 - 5 μ1 Φ1 + θl (18 + 19 Φ1 + 5 Φ1^2 + 4 Φ2 + 2 μ2
                      (6 + 3 Φ1 + Φ2) + μ1 (18 + 5 Φ1^2 + 4 Φ2 + Φ1 (19 + 6 Φ2))))) +
          x^2 (-1 + η)^2 (24 × (-1 + η) η^2 θp (-29 - 29 μ1 - 72 μ2 - Φ1 - 7 μ1 Φ1 +
               3 η (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) -
            (-1 + ηt) θl (4 × (28 μ2 + 5 × (3 + Φ1) + 5 μ1 (3 + Φ1)) +
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            θp (48 η^3 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - 48 η^2 (15 - 2 μ2 (-10 + Φ1) +
                  4 Φ1 + μ1 (15 + 7 Φ1)) - 9 η (24 + 35 Φ1 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 Φ2 +
                  8 μ2 (-6 + Φ1 + Φ2) + μ1 (24 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 (7 + Φ2)) -
               4 × (26 + 23 Φ1 + 5 Φ1^2 + 8 Φ2 + 2 μ2 (18 + 9 Φ1 + 7 Φ2) +
                  μ1 (26 + 5 Φ1^2 + 8 Φ2 + Φ1 (23 + 6 Φ2))))))) +
w^5 (-1 + η)^5 (x^2 (-1 + η)^2 (4 × (-1 + η) θp (-7 - 7 μ1 + Φ1 - 5 μ1 Φ1 +
            η (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) +
         (-1 + η t) θl (-4 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) +
            θp (64 + 57 Φ1 + 15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2) +
               μ1 (64 + 15 Φ1^2 - 3 Φ2 + Φ1 (81 + 19 Φ2))))) +
      η θp (4 η^3 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 4 η t (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) -
         4 η^2 (η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 × (8 + 14 μ2 + μ1 (8 + 3 Φ1))) + η
          (4 × (7 - Φ1 + μ1 (7 + 5 Φ1)) + θl (-64 - 57 Φ1 - 15 Φ1^2 + 3 Φ2 + 5 Φ1 Φ2 +
               8 μ2 (10 + 3 Φ1 + 3 Φ2) - μ1 (64 + 15 Φ1^2 - 3 Φ2 + Φ1 (81 + 19 Φ2))) +
            η t (8 × (3 + 18 μ2 + μ1 (3 - 2 Φ1) - 2 Φ1) + θl (64 + 57 Φ1 +
               15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2) +
               μ1 (64 + 15 Φ1^2 - 3 Φ2 + Φ1 (81 + 19 Φ2))))) -
      2 x (-1 + η) × (4 η^3 θp (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 η t θp
          (7 + 4 μ2 + 5 Φ1 + μ1 (7 + 5 Φ1)) - 4 η^2 θp (η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
            2 × (8 + 14 μ2 + μ1 (8 + 3 Φ1))) + η (2 θp
             (η t (11 + 52 μ2 + μ1 (11 - 3 Φ1) - 3 Φ1) + 2 × (7 - Φ1 + μ1 (7 + 5 Φ1))) +
            (-1 + η t) θl (2 × (1 + μ1 + 20 μ2 - 5 Φ1 - 5 μ1 Φ1) +
               θp (64 + 57 Φ1 + 15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2) +
               μ1 (64 + 15 Φ1^2 - 3 Φ2 + Φ1 (81 + 19 Φ2)))))) +
w^2 (-1 + η)^2 (2 x^5 (-1 + η)^5 θp (14 - 15 θl + 14 μ1 - 15 θl μ1 + 32 θl
          μ2 - 2 Φ1 - 5 θl Φ1 + 10 μ1 Φ1 - 17 θl μ1 Φ1 + 8 θl μ2 Φ1 + 2 η^2
          (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + η t
          θl (5 × (3 + Φ1) - 8 μ2 (4 + Φ1) + μ1 (15 + 17 Φ1)) - 2 η
          (η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 × (8 + 14 μ2 + μ1 (8 + 3 Φ1)))) -
      x^4 (-1 + η)^4 θp (20 η^3 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - 4 η^2
          (-1 - 112 μ2 - 9 Φ1 + μ1 (-1 + 21 Φ1) + 5 η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) +
         2 η (4 η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + θl (33 + μ1 (33 - 73 Φ1) -
               13 Φ1 + 8 μ2 (62 + 5 Φ1)) - η t θl (33 + μ1 (33 - 73 Φ1) - 13 Φ1 +
               8 μ2 (62 + 5 Φ1)) - 2 × (133 + 468 μ2 + 17 Φ1 + μ1 (133 + 5 Φ1))) + 3 ×
          (4 × (29 + 72 μ2 + Φ1 + μ1 (29 + 7 Φ1)) - θl (142 + 53 Φ1 + 5 Φ1^2 -
               8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + 5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 +
                  Φ1 (77 + 5 Φ2))) + η t (4 × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
               θl (142 + 53 Φ1 + 5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
                  5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 + Φ1 (77 + 5 Φ2))))) +
      2 x^3 (-1 + η)^3 (4 × (-1 + η) η θp (5 η^2 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) -
            6 × (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 + η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) -
            η (-127 - 127 μ1 - 504 μ2 - 23 Φ1 + 7 μ1 Φ1 +
               5 η t (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)))) +
         (-1 + η t) θl (-6 × (28 μ2 + 5 × (3 + Φ1) + 5 μ1 (3 + Φ1)) +
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        θp (2 η^2 (-141 + Φ1 - 8 μ2 (104 + 5 Φ1) + μ1 (-141 + 61 Φ1)) +
            6 η (142 + 53 Φ1 + 5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
                5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 + Φ1 (77 + 5 Φ2)) +
            3 × (53 + 53 Φ1 + 10 Φ1^2 + 16 Φ2 + 4 μ2 (10 + 9 Φ1 + 7 Φ2) +
                μ1 (53 + 10 Φ1^2 + 16 Φ2 + Φ1 (53 + 12 Φ2)))))) -
η θp (4 η^6 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 4 ηt (3 - 8 μ2 + 5 Φ1 +
        μ1 (3 + 5 Φ1)) - 4 η^5 (-65 - 224 μ2 - 9 Φ1 -
        μ1 (65 + 3 Φ1) + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 2 η^4
    (-4 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + θl (93 + μ1 (93 - 5 Φ1) + 7 Φ1 +
            8 μ2 (46 + Φ1)) - ηt θl (93 + μ1 (93 - 5 Φ1) + 7 Φ1 + 8 μ2 (46 + Φ1)) -
        2 × (161 + 468 μ2 + 13 Φ1 + μ1 (161 + 25 Φ1))) + 6 η^2
    (-θl (37 + 45 Φ1 + 10 Φ1^2 + 8 Φ2 + 4 μ2 (-2 + 3 Φ1 + Φ2) +
            μ1 (37 + 10 Φ1^2 + 8 Φ2 + 3 Φ1 (15 + 4 Φ2)) + ηt (-2 × (7 + 4 μ2 +
                5 Φ1 + μ1 (7 + 5 Φ1)) + θl (37 + 45 Φ1 + 10 Φ1^2 + 8 Φ2 + 4 μ2 (-2 +
                    3 Φ1 + Φ2) + μ1 (37 + 10 Φ1^2 + 8 Φ2 + 3 Φ1 (15 + 4 Φ2))))) +
    3 η^3 (4 × (29 + 72 μ2 + Φ1 + μ1 (29 + 7 Φ1)) - θl (142 + 53 Φ1 +
            5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + 5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 +
                11 Φ2 + Φ1 (77 + 5 Φ2)) + ηt (4 × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
            θl (142 + 53 Φ1 + 5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
                5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 + Φ1 (77 + 5 Φ2)))) + η
    (θl (-34 - 47 Φ1 - 15 Φ1^2 + 3 Φ2 + 5 Φ1 Φ2 + 8 μ2 (2 + Φ1 + 3 Φ2) -
            μ1 (34 + 15 Φ1^2 - 3 Φ2 + Φ1 (47 + 19 Φ2)) + ηt (8 × (9 + 10 μ2 + 5 Φ1 +
                μ1 (9 + 5 Φ1)) + θl (34 + 47 Φ1 + 15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2
                    (2 + Φ1 + 3 Φ2) + μ1 (34 + 15 Φ1^2 - 3 Φ2 + Φ1 (47 + 19 Φ2)))))) +
2 x (-1 + η) × (10 η^6 θp (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 ηt θp
    (7 + 4 μ2 + 5 Φ1 + μ1 (7 + 5 Φ1)) - 2 η^5 θp
    (-2 × (122 + 122 μ1 + 434 μ2 + 18 Φ1 + 3 μ1 Φ1) + 5 ηt (9 + 28 μ2 + Φ1 +
            μ1 (9 + Φ1))) + η^4 θp (-14 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
        θl (357 + μ1 (357 - 37 Φ1) + 23 Φ1 + 8 μ2 (188 + 5 Φ1)) -
        ηt θl (357 + μ1 (357 - 37 Φ1) + 23 Φ1 + 8 μ2 (188 + 5 Φ1)) -
        2 × (637 + 1872 μ2 + 53 Φ1 + μ1 (637 + 95 Φ1))) + 6 η^3 θp
    (4 × (29 + 72 μ2 + Φ1 + μ1 (29 + 7 Φ1)) - θl (142 + 53 Φ1 + 5 Φ1^2 -
            8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + 5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 +
                Φ1 (77 + 5 Φ2)) + ηt (4 × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
            θl (142 + 53 Φ1 + 5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
                5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 + Φ1 (77 + 5 Φ2)))) + η
    (2 ηt θp (71 + 128 μ2 + 25 Φ1 + μ1 (71 + 25 Φ1)) + (-1 + ηt)
        θl (2 × (1 + μ1 + 20 μ2 - 5 Φ1 - 5 μ1 Φ1) +
            θp (34 + 47 Φ1 + 15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2 (2 + Φ1 + 3 Φ2) +
                μ1 (34 + 15 Φ1^2 - 3 Φ2 + Φ1 (47 + 19 Φ2)))) + 3
    η^2 (-4 ηt θp (13 + 22 μ2 + 5 Φ1 + μ1 (13 + 5 Φ1)) + (-1 + ηt)
        θl (-2 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) +
            θp (127 + 143 Φ1 + 30 Φ1^2 + 32 Φ2 + 12 μ2 (2 + 5 Φ1 + 3 Φ2) +
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                μ1 (127 + 30 Φ1^2 + 32 Φ2 + Φ1 (143 + 36 Φ2)))))) -
    x^2 (-1 + η)^2 (4 × (-1 + η) θp (10 η^4 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) -
          3 ηt (19 + 40 μ2 + 5 Φ1 + μ1 (19 + 5 Φ1)) - 18 η^2
           (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) -
          2 η^3 (5 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) -
             2 (μ1 (104 + Φ1) + 2 × (52 + 189 μ2 + 8 Φ1)))) +
        (-1 + ηt) θl (-4 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) - 4 η^3 θp
           (249 + μ1 (249 - 49 Φ1) + 11 Φ1 + 8 μ2 (146 + 5 Φ1)) +
          18 η^2 θp (142 + 53 Φ1 + 5 Φ1^2 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
             5 Φ1 Φ2 + μ1 (142 + 5 Φ1^2 + 11 Φ2 + Φ1 (77 + 5 Φ2))) +
          θp (34 + 47 Φ1 + 15 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2 - 8 μ2 (2 + Φ1 + 3 Φ2) +
             μ1 (34 + 15 Φ1^2 - 3 Φ2 + Φ1 (47 + 19 Φ2))) +
          6 η (-4 × (9 + 10 μ2 + 5 Φ1 + μ1 (9 + 5 Φ1)) + θp
               (143 + 151 Φ1 + 30 Φ1^2 + 40 Φ2 + 12 μ2 (6 + 7 Φ1 + 5 Φ2) +
                μ1 (143 + 30 Φ1^2 + 40 Φ2 + Φ1 (151 + 36 Φ2)))))) +
  w^3 (-1 + η)^3 (x^4 (-1 + η)^4 θp (84 - 112 θl + 84 μ1 - 112 θl μ1 + 176 θl
          μ2 - 12 Φ1 - 51 θl Φ1 + 60 μ1 Φ1 - 123 θl μ1 Φ1 + 40 θl μ2 Φ1 - 5
          θl Φ1^2 - 5 θl μ1 Φ1^2 + 12 η^2 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 12
          ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - 12 η
          (ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 2 × (8 + 14 μ2 + μ1 (8 + 3 Φ1))) - 11
          θl Φ2 - 11 θl μ1 Φ2 - 8 θl μ2 Φ2 - 5 θl Φ1 Φ2 - 5 θl μ1 Φ1
          Φ2 + ηt θl (112 + 51 Φ1 + 5 Φ1^2 - 8 μ2 (22 + 5 Φ1 - Φ2) + 11 Φ2 +
             5 Φ1 Φ2 + μ1 (112 + 5 Φ1^2 + 11 Φ2 + Φ1 (123 + 5 Φ2)))) -
    4 x^3 (-1 + η)^3 (3 × (-1 + η) θp (-29 - 29 μ1 - 72 μ2 - Φ1 - 7 μ1 Φ1 +
          4 η^2 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) -
          η (1 + μ1 - 84 μ2 - 7 Φ1 + 17 μ1 Φ1 + 4 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)))) +
        (-1 + ηt) θl (-3 × (28 μ2 + 5 × (3 + Φ1) + 5 μ1 (3 + Φ1)) +
          θp (η (58 + 45 Φ1 + 5 Φ1^2 - 8 μ2 (43 + 5 Φ1 - Φ2) + 11 Φ2 +
                5 Φ1 Φ2 + μ1 (58 + 5 Φ1^2 + 11 Φ2 + Φ1 (117 + 5 Φ2))) +
             3 × (56 + 31 Φ1 + 5 Φ1^2 + 8 Φ2 + 2 μ2 (38 + 7 Φ1 + 7 Φ2) +
                μ1 (5 Φ1^2 + 8 × (7 + Φ2) + Φ1 (37 + 6 Φ2)))))) +
    x^2 (-1 + η)^2 (12 × (-1 + η) θp (6 η^3 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) -
          ηt (19 + 40 μ2 + 5 Φ1 + μ1 (19 + 5 Φ1)) - 3 η (29 + 29 μ1 + 72 μ2 + Φ1 +
             7 μ1 Φ1 + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) - 3 η^2 (-13 - 13 μ1 -
             84 μ2 - 5 Φ1 + 7 μ1 Φ1 + 2 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)))) +
        (-1 + ηt) θl (-12 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) + 6 η^2 θp
           (4 + 39 Φ1 + 5 Φ1^2 - 8 μ2 (64 + 5 Φ1 - Φ2) + 11 Φ2 +
             5 Φ1 Φ2 + μ1 (4 + 5 Φ1^2 + 11 Φ2 + Φ1 (111 + 5 Φ2))) +
          θp (104 + 155 Φ1 + 45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (14 + 3 Φ1 + 9 Φ2) +
             μ1 (104 + 45 Φ1^2 - 9 Φ2 + Φ1 (155 + 57 Φ2))) +
          12 η (-2 × (9 + 10 μ2 + 5 Φ1 + μ1 (9 + 5 Φ1)) + θp
               (160 + 89 Φ1 + 15 Φ1^2 + 20 Φ2 + 6 μ2 (34 + 5 Φ1 + 5 Φ2) +
                μ1 (15 Φ1^2 + 20 × (8 + Φ2) + Φ1 (107 + 18 Φ2)))))) +
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η θp (12 η^5 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 12 ηt (3 - 8 μ2 + 5 Φ1 +
      μ1 (3 + 5 Φ1)) - 12 η^4 (-11 - 56 μ2 - 3 Φ1 +
      μ1 (-11 + 3 Φ1) + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + η^3
    (-12 × (49 + 156 μ2 + 5 Φ1 + μ1 (49 + 5 Φ1)) + (-1 + ηt) θl
       (-104 + 27 Φ1 + 5 Φ1^2 - 8 μ2 (106 + 5 Φ1 - Φ2) + 11 Φ2 + 5 Φ1 Φ2 +
         μ1 (-104 + 5 Φ1^2 + 11 Φ2 + Φ1 (99 + 5 Φ2)))) + 12 η^2
    (29 + 29 μ1 + 72 μ2 + Φ1 + 7 μ1 Φ1 - θl (48 + 27 Φ1 + 5 Φ1^2 + 4 Φ2 +
          2 μ2 (26 + Φ1 + Φ2) + μ1 (48 + 33 Φ1 + 5 Φ1^2 + 4 Φ2 + 6 Φ1 Φ2)) +
      ηt (2 + 2 μ1 + 24 μ2 - 4 Φ1 - 4 μ1 Φ1 + θl (48 + 27 Φ1 + 5 Φ1^2 + 4 Φ2 +
            2 μ2 (26 + Φ1 + Φ2) + μ1 (48 + 33 Φ1 + 5 Φ1^2 + 4 Φ2 + 6 Φ1 Φ2)))) +
  η (θl (-104 - 155 Φ1 - 45 Φ1^2 + 9 Φ2 + 15 Φ1 Φ2 + 8 μ2 (14 + 3 Φ1 +
            9 Φ2) - μ1 (104 + 45 Φ1^2 - 9 Φ2 + Φ1 (155 + 57 Φ2))) +
      ηt (48 × (1 + μ1 + 3 μ2) + θl (104 + 155 Φ1 + 45 Φ1^2 - 9 Φ2 -
            15 Φ1 Φ2 - 8 μ2 (14 + 3 Φ1 + 9 Φ2) +
            μ1 (104 + 45 Φ1^2 - 9 Φ2 + Φ1 (155 + 57 Φ2))))) -
2 x (-1 + η) × (24 η^5 θp (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 6 ηt θp
    (7 + 4 μ2 + 5 Φ1 + μ1 (7 + 5 Φ1)) - 6 η^4 θp (-17 - 140 μ2 - 9 Φ1 +
      μ1 (-17 + 15 Φ1) + 4 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 6 η^2
    (θp (ηt (1 + μ1 + 40 μ2 - 7 Φ1 - 7 μ1 Φ1) + 3 × (29 + 72 μ2 + Φ1 +
            μ1 (29 + 7 Φ1))) + (-1 + ηt) θl (-3 - 3 μ1 + 8 μ2 - 5 Φ1 -
         5 μ1 Φ1 + θp (152 + 85 Φ1 + 15 Φ1^2 + 16 Φ2 + 18 μ2 (10 + Φ1 + Φ2) +
            μ1 (152 + 103 Φ1 + 15 Φ1^2 + 16 Φ2 + 18 Φ1 Φ2)))) + 2 η^3 θp
    (-6 × (70 + 234 μ2 + 8 Φ1 + 5 μ1 (14 + Φ1)) - θl (-50 + 33 Φ1 +
         5 Φ1^2 - 8 μ2 (85 + 5 Φ1 - Φ2) + 11 Φ2 + 5 Φ1 Φ2 + μ1 (-50 + 5 Φ1^2 +
            11 Φ2 + 5 Φ1 (21 + Φ2))) + ηt (3 × (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
         θl (-50 + 33 Φ1 + 5 Φ1^2 - 8 μ2 (85 + 5 Φ1 - Φ2) + 11 Φ2 +
            5 Φ1 Φ2 + μ1 (-50 + 5 Φ1^2 + 11 Φ2 + 5 Φ1 (21 + Φ2)))) + η
    (6 ηt θp (19 + 40 μ2 + 5 Φ1 + μ1 (19 + 5 Φ1)) + (-1 + ηt) θl
       (6 × (1 + μ1 + 20 μ2 - 5 Φ1 - 5 μ1 Φ1) +
         θp (104 + 155 Φ1 + 45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (14 + 3 Φ1 + 9 Φ2) +
            μ1 (104 + 45 Φ1^2 - 9 Φ2 + Φ1 (155 + 57 Φ2))))) +
w^4 (-1 + η)^4 (2 x^3 (-1 + η)^3 (6 × (-1 + η) θp (-7 - 7 μ1 + Φ1 - 5 μ1 Φ1 +
      η (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) +
    (-1 + ηt) θl (-2 × (28 μ2 + 5 × (3 + Φ1) + 5 μ1 (3 + Φ1)) +
      θp (97 + 61 Φ1 + 10 Φ1^2 + 16 Φ2 + 4 μ2 (-6 + 3 Φ1 + 7 Φ2) +
         μ1 (97 + 10 Φ1^2 + 16 Φ2 + Φ1 (97 + 12 Φ2)))) -
  x^2 (-1 + η)^2 (4 × (-1 + η) θp (-29 - 29 μ1 - 72 μ2 - Φ1 - 7 μ1 Φ1 -
      2 ηt (14 + 14 μ1 + 34 μ2 + 3 Φ1 + 3 μ1 Φ1) +
      9 η^2 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) - 3 η (-4 × (-3 + 7 μ2 + Φ1) +
         2 μ1 (6 + 7 Φ1) + 3 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)))) +
    (-1 + ηt) θl (-12 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) +
      θp (222 + 173 Φ1 + 45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2) +
         μ1 (222 + 45 Φ1^2 - 9 Φ2 + Φ1 (197 + 57 Φ2))) +
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                2 η (-4 × (9 + 10 μ2 + 5 Φ1 + μ1 (9 + 5 Φ1)) + θp
                      (239 + 171 Φ1 + 30 Φ1^2 + 40 Φ2 + 4 μ2 (-58 + 3 Φ1 + 15 Φ2) +
                        μ1 (239 + 30 Φ1^2 + 40 Φ2 + 9 Φ1 (31 + 4 Φ2)))))) -
        η θp (12 η^4 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 12 ηt (3 - 8 μ2 + 5 Φ1 +
              μ1 (3 + 5 Φ1)) - 12 η^3
            (7 - Φ1 + μ1 (7 + 5 Φ1) + ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) + 2
            η^2 (-2 × (156 μ2 - 5 μ1 (-7 + Φ1) + 7 × (5 + Φ1)) -
              θl (45 + 49 Φ1 + 10 Φ1^2 - 4 μ2 (46 + 3 Φ1 - Φ2) + 8 Φ2 +
                  μ1 (45 + 10 Φ1^2 + 8 Φ2 + Φ1 (85 + 12 Φ2))) + ηt (22 + 22 μ1 + 104 μ2 -
                  6 Φ1 - 6 μ1 Φ1 + θl (45 + 49 Φ1 + 10 Φ1^2 - 4 μ2 (46 + 3 Φ1 - Φ2) +
                      8 Φ2 + μ1 (45 + 10 Φ1^2 + 8 Φ2 + Φ1 (85 + 12 Φ2))))) + η
            (4 × (29 + 72 μ2 + Φ1 + μ1 (29 + 7 Φ1)) - θl (222 + 173 Φ1 +
                  45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2) +
                  μ1 (222 + 45 Φ1^2 - 9 Φ2 + Φ1 (197 + 57 Φ2))) +
              ηt (4 × (7 + 56 μ2 + μ1 (7 - 9 Φ1) - 9 Φ1) + θl (222 + 173 Φ1 +
                      45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2) +
                      μ1 (222 + 45 Φ1^2 - 9 Φ2 + Φ1 (197 + 57 Φ2))))) +
        2 x (-1 + η) × (18 η^4 θp (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 6 ηt θp
            (7 + 4 μ2 + 5 Φ1 + μ1 (7 + 5 Φ1)) - 6 η^3 θp
            (30 + 28 μ2 - 2 Φ1 + 2 μ1 (15 + 8 Φ1) + 3 ηt (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1))) +
          η^2 (-2 θp (49 + 312 μ2 + μ1 (49 - 25 Φ1) + 17 Φ1 +
                  ηt (-37 - 152 μ2 + 3 Φ1 + μ1 (-37 + 3 Φ1))) +
              (-1 + ηt) θl (-2 × (3 - 8 μ2 + 5 Φ1 + μ1 (3 + 5 Φ1)) +
                  θp (187 + 159 Φ1 + 30 Φ1^2 - 4 μ2 (98 + 3 Φ1 - 9 Φ2) + 32 Φ2 +
                      μ1 (187 + 30 Φ1^2 + 32 Φ2 + 3 Φ1 (89 + 12 Φ2))))) + η
            (2 θp (ηt (23 + 88 μ2 + μ1 (23 - 3 Φ1) - 3 Φ1) + 2 × (29 +
                      72 μ2 + Φ1 + μ1 (29 + 7 Φ1))) +
              (-1 + ηt) θl (6 × (1 + μ1 + 20 μ2 - 5 Φ1 - 5 μ1 Φ1) + θp
                  (222 + 173 Φ1 + 45 Φ1^2 - 9 Φ2 - 15 Φ1 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2) +
                      μ1 (222 + 45 Φ1^2 - 9 Φ2 + Φ1 (197 + 57 Φ2)))))))) +
2 × (-1 + w (-1 + η)) (w + x + η - w η - x η)^2 (x^2 (-1 + η)^2 + η (1 + η) +
    x (1 + η - 2 η^2))^2
 θl (-8 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)
    (1 + w - w η)^2
    (-1 + ηt)
    θp
    (-6 uκ + u (6 + 7 Φ1 + 3 Φ2)) - f
    (-1 + η)
    (x^2 (-1 + η)^2 θp (20 + 4 ηt - 20 θl + 20 ηt θl + 36 Φ1 + 8 ηt Φ1 - 36 θl
            Φ1 + 36 ηt θl Φ1 + 10 Φ2 + 2 ηt Φ2 - 16 θl Φ2 + 16 ηt θl Φ2 + 6 Φ1
            Φ2 - 2 ηt Φ1 Φ2 - 4 θl Φ1 Φ2 + 4 ηt θl Φ1 Φ2 - 3 θl Φ2^2 + 3 ηt θl
            Φ2^2 - 5 θl Φ1 Φ2^2 + 5 ηt θl Φ1 Φ2^2 + 4 η^2 (2 - Φ1 (-4 + Φ2) + Φ2) + 2
            η (-14 - 26 Φ1 + ηt (1 + θl) × (-2 + Φ1 (-4 + Φ2) - Φ2) -
              7 Φ2 - Φ1 Φ2 + θl (2 + 4 Φ1 + Φ2 - Φ1 Φ2)) + w (-1 + η) ×
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(-12 + 12 θl - 20 Φ1 + 20 θl Φ1 + 2 η^2 (-2 + Φ1 (-4 + Φ2) - Φ2) -
    6 Φ2 + 12 θl Φ2 - 10 Φ1 Φ2 + 8 θl Φ1 Φ2 + 3 θl Φ2^2 + 5 θl Φ1 Φ2^2 +
    η (ηt (4 + 8 Φ1 + 2 Φ2 - 2 Φ1 Φ2) + 4 × (4 + 7 Φ1 + 2 Φ2 + 2 Φ1 Φ2)) - ηt (4 +
      8 Φ1 + 2 Φ2 - 2 Φ1 Φ2 + 3 θl (2 + Φ2)^2 + θl Φ1 (20 + 8 Φ2 + 5 Φ2^2)))) +
θp (20 η^2 - 28 η^3 + 8 η^4 + 12 ηt - 12 η ηt + 4 η^2 ηt - 4 η^3 ηt - 12 η
    θl - 20 η^2 θl + 4 η^3 θl + 12 η ηt θl + 20 η^2 ηt θl - 4 η^3 ηt
    θl + 36 η^2 Φ1 - 52 η^3 Φ1 + 16 η^4 Φ1 + 8 ηt Φ1 - 8 η ηt Φ1 + 8 η^2
    ηt Φ1 - 8 η^3 ηt Φ1 - 12 η θl Φ1 - 36 η^2 θl Φ1 + 8 η^3 θl Φ1 + 12 η
    ηt θl Φ1 + 36 η^2 ηt θl Φ1 - 8 η^3 ηt θl Φ1 - 2 η θl Φ1^2 + 2 η ηt
    θl Φ1^2 + 10 η^2 Φ2 - 14 η^3 Φ2 + 4 η^4 Φ2 + 6 ηt Φ2 - 6 η ηt Φ2 + 2 η^2
    ηt Φ2 - 2 η^3 ηt Φ2 - 12 η θl Φ2 - 16 η^2 θl Φ2 + 2 η^3 θl Φ2 + 12 η
    ηt θl Φ2 + 16 η^2 ηt θl Φ2 - 2 η^3 ηt θl Φ2 + 6 η^2 Φ1 Φ2 - 2 η^3 Φ1
    Φ2 - 4 η^4 Φ1 Φ2 - 10 ηt Φ1 Φ2 + 10 η ηt Φ1 Φ2 - 2 η^2 ηt Φ1 Φ2 + 2
    η^3 ηt Φ1 Φ2 + 4 η θl Φ1 Φ2 - 4 η^2 θl Φ1 Φ2 - 2 η^3 θl Φ1 Φ2 - 4 η
    ηt θl Φ1 Φ2 + 4 η^2 ηt θl Φ1 Φ2 + 2 η^3 ηt θl Φ1 Φ2 - 3 η θl Φ2^2 - 3
    η^2 θl Φ2^2 + 3 η ηt θl Φ2^2 + 3 η^2 ηt θl Φ2^2 + 5 η θl Φ1 Φ2^2 - 5 η^2
    θl Φ1 Φ2^2 - 5 η ηt θl Φ1 Φ2^2 + 5 η^2 ηt θl Φ1 Φ2^2 - 2 w^2 (-1 + η)^2
    (η^3 (-2 + Φ1 (-4 + Φ2) - Φ2) + η^2 (8 + 14 Φ1 + 4 Φ2 + 4 Φ1 Φ2 +
          ηt (2 - Φ1 (-4 + Φ2) + Φ2)) + ηt (-3 × (2 + Φ2) + Φ1 (-4 + 5 Φ2)) -
      η ((3 + 5 Φ1) × (2 + Φ2) - θl (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2)) +
          ηt (-4 - 2 Φ2 + 4 Φ1 Φ2 + θl (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2))))) + w
    (-1 + η) × (2 η^4 (-2 + Φ1 (-4 + Φ2) - Φ2) + 4 ηt (-3 × (2 + Φ2) +
          Φ1 (-4 + 5 Φ2)) + 2 η^3 (ηt (2 - Φ1 (-4 + Φ2) + Φ2) +
          2 × (2 + Φ2 + 3 Φ1 (1 + Φ2))) + η^2 (8 × (2 - Φ1 (-4 + Φ2) + Φ2) -
          (-1 + ηt) θl (8 + 10 Φ2 + 3 Φ2^2 + Φ1 (12 + 10 Φ2 + 5 Φ2^2))) -
      η (20 + 36 Φ1 + 10 Φ2 + 6 Φ1 Φ2 - θl (44 + 4 Φ1^2 + 40 Φ2 + 9 Φ2^2 + Φ1
              (60 - 4 Φ2 - 5 Φ2^2)) + ηt (2 × (-5 × (2 + Φ2) + Φ1 (-4 + 9 Φ2)) +
            θl (44 + 4 Φ1^2 + 40 Φ2 + 9 Φ2^2 + Φ1 (60 - 4 Φ2 - 5 Φ2^2))))))) -
x (-1 + η) × (-2 (w (-1 + η) - 2 η) (-1 + η) θp (-10 + 4 η - 2 ηt -
      18 Φ1 + 8 η Φ1 - 4 ηt Φ1 - 5 Φ2 + 2 η Φ2 - ηt Φ2 - 3 Φ1 Φ2 -
      2 η Φ1 Φ2 + ηt Φ1 Φ2 + w (-1 + η) (η (-2 + Φ1 (-4 + Φ2) - Φ2) +
          (3 + 5 Φ1) × (2 + Φ2) + ηt (2 + 4 Φ1 + Φ2 - Φ1 Φ2))) + (-1 + ηt) θl
    (-12 + 12 θp + 40 η θp - 8 η^2 θp - 8 Φ1 + 12 θp Φ1 + 72 η θp Φ1 -
      16 η^2 θp Φ1 + 2 θp Φ1^2 - 6 Φ2 + 12 θp Φ2 + 32 η θp Φ2 - 4 η^2 θp Φ2 +
      10 Φ1 Φ2 - 4 θp Φ1 Φ2 + 8 η θp Φ1 Φ2 + 4 η^2 θp Φ1 Φ2 + 3 θp Φ2^2 +
      6 η θp Φ2^2 - 5 θp Φ1 Φ2^2 + 10 η θp Φ1 Φ2^2 + 2 w^2 (-1 + η)^2 (-3 × (2 + Φ2) +
          Φ1 (-4 + 5 Φ2) + θp (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2))) -
      w (-1 + η) × (4 × (-3 × (2 + Φ2) + Φ1 (-4 + 5 Φ2)) +
          θp (44 + 4 Φ1^2 + 40 Φ2 + 9 Φ2^2 + Φ1 (60 - 4 Φ2 - 5 Φ2^2) +
              2 η (10 + 11 Φ2 + 3 Φ2^2 + Φ1 (16 + 9 Φ2 + 5 Φ2^2)))))))) +
2 cσ^2 (-1 + η)^2 (w^5 (-1 + η)^6 (2 x^5 (-1 + η)^5 θp (η - ηt + 4 μ1)
      (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
    x^4 (-1 + η)^3 ((-1 + ηt) θl (-18 - 21 μ2 + 8 μ2^2 - 10 Φ1 + 5 μ2 Φ1 -
          20 μ1 (1 + Φ1) + μ1 μ2 (43 + 5 Φ1) + μ1^2 (-2 + 26 Φ1)) + 2 ×
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      (-1 + η) θp (9 + 42 μ1 + 33 μ1^2 + 27 μ2 + 59 μ1 μ2 + 5 Φ1 + 12 μ1 Φ1 +
        7 μ1^2 Φ1 + 11 μ2 Φ1 - 7 μ1 μ2 Φ1 + 5 η^2 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
        η (-5 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) + 2 × (3 - μ2 - 14 μ2^2 +
              μ1 μ2 (35 - 3 Φ1) + Φ1 + 11 μ1 (3 + Φ1) + 10 μ1^2 (3 + Φ1))) +
        2 ηt (-3 + μ2 + 14 μ2^2 - Φ1 + μ1 (-3 - Φ1 + μ2 (5 + 3 Φ1)))))) -
η θp (2 η^5 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) + ηt μ2 (11 + 8 μ2 + 5 Φ1 +
        μ1 (11 + 5 Φ1)) + 2 η ηt (-9 + 8 μ2^2 + μ1^2 (-21 + Φ1) +
        5 μ2 (-1 + Φ1) - 5 Φ1 + 5 μ1 (μ2 (-1 + Φ1) - 2 × (3 + Φ1))) - 2
      η^4 (ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (3 - μ2 - 14 μ2^2 +
            Φ1 + 2 μ1^2 (3 + Φ1) + 3 μ1 (3 + μ2 + Φ1 - μ2 Φ1))) + 2
      η^3 (12 + 21 μ2 - 52 μ2^2 + 6 Φ1 + 11 μ2 Φ1 + μ1^2 (33 + 7 Φ1) +
        μ1 (45 + 49 μ2 + 13 Φ1 - 13 μ2 Φ1) +
        2 ηt (-3 + μ2 + 14 μ2^2 - Φ1 + μ1 (-3 + 5 μ2 - Φ1 + 3 μ2 Φ1))) + η^2
      (2 × (9 + 32 μ2^2 + 5 Φ1 + 3 μ1^2 (7 + Φ1) + μ2 (47 + 11 Φ1) +
            μ1 (30 + 8 Φ1 + μ2 (63 + 5 Φ1))) +
        ηt (64 μ2^2 - 12 × (2 + Φ1) + μ2 (-9 + 5 Φ1) + μ1^2 (-2 + 26 Φ1) +
            μ1 (-26 - 22 Φ1 + μ2 (111 + 17 Φ1))))) +
x^3 (-1 + η)^2 ((-1 + ηt) θl (2 × (-9 + 8 μ2^2 + μ1^2 (-21 + Φ1) +
            5 μ2 (-1 + Φ1) - 5 Φ1 + 5 μ1 (μ2 (-1 + Φ1) - 2 × (3 + Φ1))) +
        η (-58 + 12 μ2^2 - 30 Φ1 + 6 μ1^2 (-5 + 11 Φ1) + μ2 (-79 + 15 Φ1) +
            μ1 (-88 - 60 Φ1 + 3 μ2 (51 + 5 Φ1)))) +
    (-1 + η) θp (20 η^3 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 4 η^2
          (5 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 4 × (3 - μ2 - 14 μ2^2 -
                3 μ1 μ2 (-5 + Φ1) + Φ1 + 6 μ1 (3 + Φ1) + 5 μ1^2 (3 + Φ1))) +
        2 × (9 + 32 μ2^2 + 5 Φ1 + 3 μ1^2 (7 + Φ1) + μ2 (47 + 11 Φ1) +
            μ1 (30 + 8 Φ1 + μ2 (63 + 5 Φ1))) + ηt (76 μ2^2 - 4 × (5 + 3 Φ1) +
            μ2 (7 + 5 Φ1) + μ1^2 (22 + 38 Φ1) + μ1 (2 - 22 Φ1 + μ2 (87 + 17 Φ1))) +
        2 η (39 + 102 μ2 - 52 μ2^2 + 21 Φ1 + 44 μ2 Φ1 + 4 μ1^2 (33 + 7 Φ1) +
            μ1 (171 + 226 μ2 + 49 Φ1 - 34 μ2 Φ1) +
            8 ηt (-3 + μ2 + 14 μ2^2 - Φ1 + μ1 (-3 + 5 μ2 - Φ1 + 3 μ2 Φ1))))) -
x^2 (-1 + η) × (20 η^5 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - θl μ2
      (11 + 8 μ2 + 5 Φ1 + μ1 (11 + 5 Φ1)) - 4 η^4 θp
      (-3 + 26 μ2 + 84 μ2^2 - Φ1 - 21 μ1 (3 + Φ1) - 20 μ1^2 (3 + Φ1) +
        2 μ1 μ2 (-25 + 9 Φ1) + 5 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + ηt
      (-2 θp (-5 + 11 μ2 + 20 μ2^2 + 7 μ1^2 (-1 + Φ1) - 5 Φ1 +
            5 μ2 Φ1 + 5 μ1 μ2 (3 + Φ1) - 2 μ1 (6 + 5 Φ1)) +
        θl μ2 (11 + 8 μ2 + 5 Φ1 + μ1 (11 + 5 Φ1))) + 2 η^3 θp
      (2 μ1^2 (39 + Φ1) + μ1 (105 + 224 μ2 + 23 Φ1 - 24 μ2 Φ1) +
        3 × (9 + 52 μ2 + 4 μ2^2 + 7 Φ1 + 22 μ2 Φ1) +
        2 ηt (-3 + 26 μ2 + 84 μ2^2 - Φ1 + μ1 (-3 - Φ1 + 6 μ2 (5 + 3 Φ1))) + η^2
      ((-1 + ηt) θl (-62 + 54 μ1^2 (-1 + Φ1) - 30 Φ1 + 5 μ2 (-19 + 3 Φ1) +
            3 μ1 μ2 (59 + 5 Φ1) - 4 μ1 (29 + 15 Φ1)) +
        θp (-6 × (12 + μ2 - 84 μ2^2 + 6 Φ1 + 11 μ2 Φ1 + μ1^2 (45 + 11 Φ1) +
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                μ1 (57 + 45 μ2 + 17 Φ1 - 25 μ2 Φ1)) +
            ηt (8 - 19 μ2 - 120 μ2^2 - 12 Φ1 + 15 μ2 Φ1 + 6 μ1^2 (7 + 17 Φ1) +
                μ1 (50 + 165 μ2 - 42 Φ1 - 21 μ2 Φ1))) - η
        (4 × (-1 + ηt) θl (11 + 13 μ2 - 2 μ2^2 + 5 Φ1 - 5 μ2 Φ1 + 2 μ1^2
            (14 + Φ1) + μ1 (39 - 5 μ2 (-3 + Φ1) + 10 Φ1)) +
          θp (6 × (9 + 47 μ2 + 32 μ2^2 + 5 Φ1 + 11 μ2 Φ1 + 3 μ1^2 (7 + Φ1) +
                μ1 (30 + 63 μ2 + 8 Φ1 + 5 μ2 Φ1)) +
            ηt (-54 - 17 μ2 + 176 μ2^2 - 26 Φ1 + 5 μ2 Φ1 + 8 μ1^2
                (7 + 11 Φ1) + μ1 (2 + 255 μ2 - 46 Φ1 + 41 μ2 Φ1))))) +
    x (10 η^6 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 η^5 θp (-9 + 28 μ2 +
          112 μ2^2 - 3 Φ1 - 23 μ1 (3 + Φ1) - 20 μ1^2 (3 + Φ1) +
          8 μ1 μ2 (-5 + 3 Φ1) + 5 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + 2
        η^4 θp (21 + 98 μ2 - 44 μ2^2 + 15 Φ1 + 44 μ2 Φ1 + 8 μ1^2 (9 + Φ1) +
          μ1 (93 + 166 μ2 + 23 Φ1 - 22 μ2 Φ1) +
          ηt (-9 + 28 μ2 + 112 μ2^2 - 3 Φ1 - 3 μ1 (3 + Φ1) + 8 μ1 μ2 (5 + 3 Φ1))) - ηt
        θp (4 + 4 μ1^2 + 20 μ2^2 + μ2 (27 + 5 Φ1) + μ1 (8 + μ2 (27 + 5 Φ1))) + η
        (ηt θp (32 + 15 μ2 - 36 μ2^2 + μ1^2 (60 - 16 Φ1) + 20 Φ1 - 15 μ2 Φ1 +
            μ1 (92 + 7 μ2 + 40 Φ1 - 15 μ2 Φ1)) - (-1 + ηt) θl
          (4 + 4 μ1^2 + 5 μ2 + 4 μ2^2 - 5 μ2 Φ1 + μ1 (8 + 5 μ2 - 5 μ2 Φ1))) -
      η^2 (2 × (-1 + ηt) θl (13 + 21 μ2 + 4 μ2^2 + 5 Φ1 - 5 μ2 Φ1 +
            5 μ1^2 (7 + Φ1) + μ1 (48 - 5 μ2 (-5 + Φ1) + 10 Φ1)) +
          θp (6 × (9 + 47 μ2 + 32 μ2^2 + 5 Φ1 + 11 μ2 Φ1 + 3 μ1^2 (7 + Φ1) +
                μ1 (30 + 63 μ2 + 8 Φ1 + 5 μ2 Φ1)) +
            ηt (-40 - 23 μ2 + 148 μ2^2 - 16 Φ1 - 5 μ2 Φ1 + 74 μ1^2 (1 + Φ1) +
                μ1 (34 + 289 μ2 - 26 Φ1 + 31 μ2 Φ1))) + η^3
        ((-1 + ηt) θl (-22 - 37 μ2 - 4 μ2^2 - 10 Φ1 + 5 μ2 Φ1 + 2 μ1^2
            (-13 + 7 Φ1) + μ1 (-48 + 67 μ2 - 20 Φ1 + 5 μ2 Φ1)) +
          θp (-2 × (18 - 252 μ2^2 + 8 Φ1 + μ2 (-51 + 11 Φ1) + μ1^2
                (69 + 19 Φ1) + μ1 (87 + μ2 (17 - 61 Φ1) + 27 Φ1)) +
            ηt (-20 μ2^2 - 20 × (1 + Φ1) + 3 μ2 (-9 + 5 Φ1) + 18 μ1^2
                (1 + 5 Φ1) + μ1 (-2 - 50 Φ1 + μ2 (229 + 3 Φ1)))))) +
  w^4 (-1 + η)^4 (6 x^6 (-1 + η)^7 θp (η - ηt + 4 μ1) (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
    x^5 (-1 + η)^5 (-2 × (-1 + η) θp (47 + 185 μ1 + 138 μ1^2 + 141 μ2 +
          237 μ1 μ2 + 15 Φ1 + 51 μ1 Φ1 + 30 μ1^2 Φ1 + 33 μ2 Φ1 -
          21 μ1 μ2 Φ1 + 18 η^2 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
          η (29 + 14 μ2 - 84 μ2^2 + 9 Φ1 + 72 μ1^2 (3 + Φ1) + μ1 (245 + 258 μ2 +
                81 Φ1 - 18 μ2 Φ1) - 18 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
          ηt (-29 - 14 μ2 + 84 μ2^2 - 9 Φ1 + μ1 (-29 - 9 Φ1 + 6 μ2 (5 + 3 Φ1)))) +
        (-1 + ηt) θl (-2 × (-11 + 24 μ2 + 36 μ2^2 - 15 Φ1 + μ1^2 (29 + 27 Φ1) +
            6 μ1 (3 - 6 Φ1 + 2 μ2 (12 + Φ1))) + θp (72 + 17 Φ1 + 5 Φ1^2 +
            12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 + 12 μ1^2 (6 + Φ1 + Φ2) +
            μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) + μ1 (144 + 29 Φ1 + 11 Φ1^2 +
                19 Φ2 - 11 Φ1 Φ2 + μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))))) +
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η θp (6 η^7 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 3 ηt μ2 (11 + 8 μ2 + 5 Φ1 +
      μ1 (11 + 5 Φ1)) + η ηt (-96 μ2^2 - 8 μ1^2 (-14 + Φ1) + 40 × (1 + Φ1) -
      3 μ2 (11 + 5 Φ1) + μ1 (152 + 68 Φ1 - 3 μ2 (11 + 13 Φ1))) - 2 η^6
    (3 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (10 + μ2 - 42 μ2^2 + 3 Φ1 +
        6 μ1^2 (3 + Φ1) + μ1 (28 + 9 μ2 + 9 Φ1 - 9 μ2 Φ1))) + 2 η^5
    (49 + 119 μ2 - 156 μ2^2 + 15 Φ1 + 33 μ2 Φ1 + 6 μ1^2 (17 + 3 Φ1) +
      μ1 (151 + 159 μ2 + 39 Φ1 - 39 μ2 Φ1) +
      2 ηt (-10 - μ2 + 42 μ2^2 - 3 Φ1 + μ1 (-10 + 15 μ2 - 3 Φ1 + 9 μ2 Φ1))) -
  η^3 (116 + 320 μ1 + 144 ηt μ1 + 204 μ1^2 + 144 ηt μ1^2 + 294 μ2 -
      37 ηt μ2 + 350 μ1 μ2 + 139 ηt μ1 μ2 - 200 μ2^2 + 72 ηt μ2^2 + 36 Φ1 +
      28 ηt Φ1 + 84 μ1 Φ1 + 64 ηt μ1 Φ1 + 36 μ1^2 Φ1 - 24 ηt μ1^2 Φ1 + 74 μ2 Φ1 -
      15 ηt μ2 Φ1 - 94 μ1 μ2 Φ1 - 3 ηt μ1 μ2 Φ1 + 2 × (-1 + ηt) θl (72 + 17 Φ1 +
        5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 + 12 μ1^2 (6 + Φ1 + Φ2) +
        μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) + μ1 (144 + 29 Φ1 + 11 Φ1^2 +
          19 Φ2 - 11 Φ1 Φ2 + μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))) +
  η^4 (72 + 150 μ1 + 78 μ1^2 + 520 μ2 + 488 μ1 μ2 + 520 μ2^2 + 28 Φ1 +
      26 μ1 Φ1 - 14 μ1^2 Φ1 + 68 μ2 Φ1 + 32 μ1 μ2 Φ1 +
      2 ηt (-13 + 92 μ2^2 - 2 μ2 (-19 + Φ1) - 15 Φ1 + μ1^2 (37 + 23 Φ1) +
        μ1 (24 - 34 Φ1 + μ2 (266 + 34 Φ1))) + θl (72 + 17 Φ1 + 5 Φ1^2 +
        12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 + 12 μ1^2 (6 + Φ1 + Φ2) +
        μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) + μ1 (144 + 29 Φ1 + 11 Φ1^2 +
          19 Φ2 - 11 Φ1 Φ2 + μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))) -
      ηt θl (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
        12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
        μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
          μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))) - η^2
    (2 × (56 + 120 μ2^2 + 20 Φ1 + 5 μ1^2 (15 + Φ1) + 6 μ2 (41 + 5 Φ1) +
        μ1 (131 + 31 Φ1 + 6 μ2 (41 + Φ1))) - θl (72 + 17 Φ1 + 5 Φ1^2 +
        12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 + 12 μ1^2 (6 + Φ1 + Φ2) +
        μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) + μ1 (144 + 29 Φ1 + 11 Φ1^2 +
          19 Φ2 - 11 Φ1 Φ2 + μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))) +
      ηt (-44 - 2 μ1 + 42 μ1^2 + 19 μ2 + 387 μ1 μ2 + 160 μ2^2 - 36 Φ1 -
        82 μ1 Φ1 + 62 μ1^2 Φ1 - 19 μ2 Φ1 + 53 μ1 μ2 Φ1 +
        θl (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
          12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
          μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
            μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))))) +
x^4 (-1 + η)^4 (2 × (-1 + η) θp (103 - 38 ηt + 280 μ1 + 25 ηt μ1 +
      177 μ1^2 + 63 ηt μ1^2 + 395 μ2 + 40 ηt μ2 + 443 μ1 μ2 +
      244 ηt μ1 μ2 + 168 μ2^2 + 188 ηt μ2^2 + 35 Φ1 - 24 ηt Φ1 + 70 μ1 Φ1 -
      43 ηt μ1 Φ1 + 23 μ1^2 Φ1 + 41 ηt μ1^2 Φ1 + 67 μ2 Φ1 - 2 ηt μ2 Φ1 -
      23 μ1 μ2 Φ1 + 52 ηt μ1 μ2 Φ1 + 45 η^3 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
      5 η^2 (-29 - 14 μ2 + 84 μ2^2 - 9 Φ1 - 36 μ1^2 (3 + Φ1) + 9 ηt (3 + 4 μ2 +
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                Φ1 + μ1 (3 + Φ1)) + μ1 (-137 - 45 Φ1 + 6 μ2 (-19 + 3 Φ1))) +
          η (266 + 697 μ2 - 240 μ2^2 + 84 Φ1 + 165 μ2 Φ1 + 30 μ1^2 (23 + 5 Φ1) +
             μ1 (956 + 1125 μ2 + 264 Φ1 - 141 μ2 Φ1) + 5 ηt
              (-29 - 14 μ2 + 84 μ2^2 - 9 Φ1 + μ1 (-29 - 9 Φ1 + 6 μ2 (5 + 3 Φ1))))) -
       (-1 + ηt) θl (62 + 132 μ1 + 70 μ1^2 - 81 μ2 - 225 μ1 μ2 - 168 μ2^2 +
          70 Φ1 + 148 μ1 Φ1 - 78 μ1^2 Φ1 - 15 μ2 Φ1 - 63 μ1 μ2 Φ1 +
          2 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
             12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
             μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))) +
          η (-4 × (40 μ2 + 66 μ2^2 + 45 μ1^2 (1 + Φ1) - 6 × (4 + 5 Φ1) +
                μ1 (21 - 72 Φ1 + μ2 (314 + 24 Φ1))) + 5 θp
              (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
                μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                   μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))) +
    x^3 (-1 + η)^3 (-((-1 + η) θp (120 η^4 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
             20 η^3 (-29 - 14 μ2 + 84 μ2^2 - 9 Φ1 - 24 μ1^2 (3 + Φ1) + μ1 (-101 -
                66 μ2 - 33 Φ1 + 18 μ2 Φ1) + 6 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
             2 × (56 + 120 μ2^2 + 20 Φ1 + 5 μ1^2 (15 + Φ1) + 6 μ2 (41 + 5 Φ1) +
                μ1 (131 + 31 Φ1 + 6 μ2 (41 + Φ1))) +
             ηt (-56 + 364 μ2^2 - 76 Φ1 + μ2 (197 + 11 Φ1) + 2 μ1^2
                (39 + 71 Φ1) + μ1 (22 - 150 Φ1 + μ2 (469 + 107 Φ1))) +
             2 η (423 + 1578 μ2 + 524 μ2^2 + 143 Φ1 + 268 μ2 Φ1 +
                μ1^2 (708 + 92 Φ1) + μ1 (1131 + 1750 μ2 + 283 Φ1 - 110 μ2 Φ1) +
                2 ηt (-78 + 72 μ2 + 370 μ2^2 - 48 Φ1 - 4 μ2 Φ1 +
                   μ1^2 (113 + 73 Φ1) + μ1 (35 + 514 μ2 - 86 Φ1 + 104 μ2 Φ1))) +
             4 η^2 (297 + 689 μ2 - 480 μ2^2 + 93 Φ1 + 165 μ2 Φ1 + 30 μ1^2
                (23 + 5 Φ1) + 3 μ1 (329 + 355 μ2 + 91 Φ1 - 59 μ2 Φ1) + 5 ηt (-29 -
                   14 μ2 + 84 μ2^2 - 9 Φ1 + μ1 (-29 - 9 Φ1 + 6 μ2 (5 + 3 Φ1))))))) +
       (-1 + ηt) θl (-2 × (60 μ2^2 + 4 μ1^2 (-14 + Φ1) - 20 × (1 + Φ1) +
             3 μ2 (11 + 5 Φ1) + μ1 (-76 - 34 Φ1 + 3 μ2 (11 + 9 Φ1))) +
          θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
             12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
             μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))) +
          2 η^2 (-6 × (-13 + 16 μ2 + 30 μ2^2 - 15 Φ1 + 2 μ1^2 (8 + 9 Φ1) +
                μ1 (3 - 36 Φ1 + 2 μ2 (85 + 6 Φ1))) + 5 θp
              (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
                μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                   μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))) +
          η (214 + 572 μ1 + 358 μ1^2 - 131 μ2 - 659 μ1 μ2 - 420 μ2^2 +
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            210 Φ1 + 444 μ1 Φ1 - 162 μ1^2 Φ1 - 45 μ2 Φ1 - 189 μ1 μ2 Φ1 +
            8 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
                μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                    μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))) -
x (-1 + η) × (36 η^7 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 η^6 θp
    (-91 + 2 μ2 + 420 μ2^2 - 27 Φ1 - 72 μ1^2 (3 + Φ1) +
      μ1 (-307 - 138 μ2 - 99 Φ1 + 90 μ2 Φ1) +
      18 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) - 3 ηt θp
    (4 + 4 μ1^2 + 20 μ2^2 + μ2 (27 + 5 Φ1) + μ1 (8 + μ2 (27 + 5 Φ1))) + η
    (-3 × (-1 + ηt) θl (4 + 4 μ1^2 + 4 μ2^2 + μ1 (8 - 5 μ2 (-1 + Φ1)) -
          5 μ2 (-1 + Φ1)) + ηt θp (60 - 276 μ2^2 + μ1^2 (144 - 52 Φ1) + 80 Φ1 +
          68 μ1 (3 + 2 Φ1) - μ2 (179 + 45 Φ1) - μ1 μ2 (203 + 93 Φ1))) + 2 η^5 θp
    (214 + 603 μ2 - 540 μ2^2 + 66 Φ1 + 165 μ2 Φ1 + 6 μ1^2 (79 + 13 Φ1) +
      μ1 (688 + 807 μ2 + 174 Φ1 - 159 μ2 Φ1) +
      ηt (-91 + 2 μ2 + 420 μ2^2 - 27 Φ1 + μ1 (-91 - 27 Φ1 + 30 μ2 (5 + 3 Φ1)))) -
  η^2 (θp (ηt (588 μ2^2 + μ2 (107 - 27 Φ1) + 10 μ1^2 (7 + 23 Φ1) -
              4 × (44 + 37 Φ1) + μ1 (-106 + 1091 μ2 - 314 Φ1 + 213 μ2 Φ1)) +
          6 × (56 + 120 μ2^2 + 20 Φ1 + 5 μ1^2 (15 + Φ1) + 6 μ2 (41 + 5 Φ1) +
              μ1 (131 + 31 Φ1 + 6 μ2 (41 + Φ1)))) +
      (-1 + ηt) θl (72 + 276 μ1 + 204 μ1^2 + 62 μ2 + 86 μ1 μ2 -
          24 μ2^2 + 40 Φ1 + 68 μ1 Φ1 + 28 μ1^2 Φ1 - 30 μ2 Φ1 - 54 μ1 μ2 Φ1 +
          3 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
              12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
              μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                  μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))) +
  η^4 (2 θp (86 + 901 μ2 + 1188 μ2^2 + μ1^2 (18 - 58 Φ1) + 38 Φ1 +
          103 μ2 Φ1 + μ1 (104 + 761 μ2 - 2 Φ1 + 103 μ2 Φ1) +
          ηt (-19 + 182 μ2 + 296 μ2^2 - 51 Φ1 - 8 μ2 Φ1 + 2 μ1^2 (87 + 55 Φ1) +
              μ1 (155 + 982 μ2 - 127 Φ1 + 118 μ2 Φ1))) -
      (-1 + ηt) θl (-2 × (8 μ2 + 24 μ2^2 - 15 × (1 + Φ1) + μ1^2
                (3 + 9 Φ1) + 4 μ1 (-3 - 9 Φ1 + μ2 (49 + 3 Φ1))) + 5 θp
            (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
              12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
              μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                  μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))) - η^3
    (θp (2 × (277 + 836 μ2 - 132 μ2^2 + 89 Φ1 + 178 μ2 Φ1 + 7 μ1^2
                (69 + 11 Φ1) + μ1 (760 + 968 μ2 + 196 Φ1 - 164 μ2 Φ1) +
          ηt (-104 - 143 μ2 + 508 μ2^2 + μ1^2 (410 - 62 Φ1) + 36 Φ1 -
              49 μ2 Φ1 + μ1 (306 + 889 μ2 + 106 Φ1 + 95 μ2 Φ1))) +
      (-1 + ηt) θl (90 + 308 μ1 + 218 μ1^2 + 31 μ2 - 209 μ1 μ2 -
          84 μ2^2 + 70 Φ1 + 148 μ1 Φ1 - 6 μ1^2 Φ1 - 15 μ2 Φ1 - 63 μ1 μ2 Φ1 +
          8 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
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                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
                μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                    μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))))) +
x^2 (-1 + η)^2 (8 ηt θp + 28 ηt θp μ1 + 20 ηt θp μ1^2 - 33 θl μ2 + 33 ηt
    θl μ2 - 194 ηt θp μ2 - 33 θl μ1 μ2 + 33 ηt θl μ1 μ2 - 218
    ηt θp μ1 μ2 - 24 θl μ2^2 + 24 ηt θl μ2^2 - 216 ηt θp
    μ2^2 + 40 ηt θp Φ1 + 68 ηt θp μ1 Φ1 - 44 ηt θp μ1^2 Φ1 - 15
    θl μ2 Φ1 + 15 ηt θl μ2 Φ1 - 30 ηt θp μ2 Φ1 - 15 θl μ1
    μ2 Φ1 + 15 ηt θl μ1 μ2 Φ1 - 54 ηt θp μ1 μ2 Φ1 + 90 η^6 θp
    (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 10 η^5 θp (-31 + 8 μ2 + 168 μ2^2 -
      9 Φ1 - 36 μ1^2 (3 + Φ1) + μ1 (-139 - 84 μ2 - 45 Φ1 + 36 μ2 Φ1) +
      9 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + 2 η^4 θp
    (2 × (183 + 611 μ2 - 300 μ2^2 + 57 Φ1 + 165 μ2 Φ1 + 60 μ1^2 (7 + Φ1) +
          μ1 (603 + 795 μ2 + 147 Φ1 - 123 μ2 Φ1)) + 5 ηt
        (-31 + 8 μ2 + 168 μ2^2 - 9 Φ1 + μ1 (-31 + 60 μ2 - 9 Φ1 + 36 μ2 Φ1))) -
  η (θp (6 × (56 + 120 μ2^2 + 20 Φ1 + 5 μ1^2 (15 + Φ1) + 6 μ2 (41 + 5 Φ1) +
              μ1 (131 + 31 Φ1 + 6 μ2 (41 + Φ1))) +
          ηt (792 μ2^2 - 188 × (1 + Φ1) + 3 μ2 (95 + Φ1) + 2 μ1^2
                (53 + 155 Φ1) + μ1 (-82 - 382 Φ1 + 3 μ2 (391 + 89 Φ1)))) +
      (-1 + ηt) θl (4 × (28 - μ2 - 36 μ2^2 + 20 Φ1 - 15 μ2 Φ1 +
              μ1^2 (79 + 5 Φ1) + μ1 (107 + μ2 (5 - 27 Φ1) + 34 Φ1)) +
          3 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
              12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
              μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                  μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))))) - 2
    η^3 (-θp (-5 + 1002 μ2 + 2004 μ2^2 + 15 Φ1 + 72 μ2 Φ1 - 6 μ1^2
            (53 + 27 Φ1) + μ1 (-323 - 135 Φ1 + 6 μ2 (97 + 39 Φ1)) +
          2 ηt (25 + 166 μ2 + 126 μ2^2 - 27 Φ1 - 6 μ2 Φ1 + 6 μ1^2 (25 + 16 Φ1) +
              μ1 (175 - 84 Φ1 + 66 μ2 (10 + Φ1)))) + (-1 + ηt)
        θl (-2 × (-28 + 24 μ2 + 54 μ2^2 - 30 Φ1 + μ1^2 (19 + 27 Φ1) +
              3 μ1 (-3 + 122 μ2 - 24 Φ1 + 8 μ2 Φ1)) + 5 θp
            (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
              12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
              μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                  μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2)))))) -
    η^2 (θp (6 × (161 + 542 μ2 + 68 μ2^2 + 53 Φ1 + 104 μ2 Φ1 + μ1^2
                (279 + 41 Φ1) + μ1 (440 + 618 μ2 + 112 Φ1 - 70 μ2 Φ1)) +
          ηt (-284 - 95 μ2 + 1176 μ2^2 - 60 Φ1 - 57 μ2 Φ1 + μ1^2
                (514 + 30 Φ1) + μ1 (230 + 1849 μ2 - 66 Φ1 + 303 μ2 Φ1))) +
      (-1 + ηt) θl (242 + 748 μ1 + 506 μ1^2 - 19 μ2 - 643 μ1 μ2 -
          336 μ2^2 + 210 Φ1 + 444 μ1 Φ1 - 90 μ1^2 Φ1 - 45 μ2 Φ1 - 189 μ1 μ2 Φ1 +
          12 θp (72 + 17 Φ1 + 5 Φ1^2 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 - 5 Φ1 Φ2 +
              12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 5 Φ1^2 + 37 Φ2 - 5 Φ1 Φ2) +
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                μ1 (144 + 29 Φ1 + 11 Φ1^2 + 19 Φ2 - 11 Φ1 Φ2 +
                    μ2 (288 + 5 Φ1^2 - 5 Φ1 (-7 + Φ2) + 61 Φ2))))))) +
w^3 (-1 + η)^3 (6 x^7 (-1 + η)^8 θp (η - ηt + 4 μ1) (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
    x^6 (-1 + η)^6 (6 × (-1 + η) θp (29 + 101 μ1 + 72 μ1^2 + 87 μ2 +
            119 μ1 μ2 + 5 Φ1 + 27 μ1 Φ1 + 16 μ1^2 Φ1 + 11 μ2 Φ1 -
            7 μ1 μ2 Φ1 + 7 η^2 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
            η (17 + 18 μ2 - 28 μ2^2 + 5 Φ1 + 28 μ1^2 (3 + Φ1) + μ1 (101 -
                    6 μ2 (-17 + Φ1) + 33 Φ1) - 7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
            ηt (-17 - 18 μ2 + 28 μ2^2 - 5 Φ1 + μ1 (-17 - 5 Φ1 + 2 μ2 (5 + 3 Φ1)))) -
        (-1 + ηt) θl (28 - 52 μ1 - 80 μ1^2 + 11 μ2 - 325 μ1 μ2 + 8 μ2^2 +
            20 Φ1 + 72 μ1 Φ1 - 32 μ1^2 Φ1 + 5 μ2 Φ1 - 19 μ1 μ2 Φ1 +
            θp (146 + 15 Φ1 + 5 Φ1^2 + μ2^2 (48 - 88 Φ2) +
                μ2 (510 + 5 Φ1^2 - 5 Φ1 (-5 + Φ2) - 3 Φ2) - 5 Φ2 - 5 Φ1 Φ2 + μ1^2
                  (148 + 3 Φ1^2 + 11 Φ2 + Φ1 (5 + Φ2)) + μ1 (20 Φ1^2 - 16 Φ1 (-2 + Φ2) +
                    6 × (49 + Φ2) + μ2 (462 + 5 Φ1^2 + 45 Φ2 - Φ1 (39 + 17 Φ2))))) +
    x^5 (-1 + η)^5 ((-1 + η) θp (126 η^3 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
            2 × (235 + 312 μ2^2 + 63 Φ1 + μ1^2 (414 + 58 Φ1) +
                μ2 (801 + 121 Φ1) + μ1 (649 + μ2 (905 - 65 Φ1) + 163 Φ1)) +
            ηt (-190 - 103 μ2 + 508 μ2^2 - 66 Φ1 - 13 μ2 Φ1 + 4 μ1^2
                  (36 + 13 Φ1) + μ1 (-46 + 633 μ2 - 110 Φ1 + 167 μ2 Φ1)) -
            18 η^2 (7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (17 + 18 μ2 - 28 μ2^2 +
                    5 Φ1 + 14 μ1^2 (3 + Φ1) + μ1 (59 + 46 μ2 + 19 Φ1 - 6 μ2 Φ1))) +
            2 η (609 + 1610 μ2 - 408 μ2^2 + 113 Φ1 + 198 μ2 Φ1 + 144 μ1^2
                  (9 + 2 Φ1) + μ1 (1905 + 2022 μ2 + 509 Φ1 - 198 μ2 Φ1) + 18 ηt
                  (-17 - 18 μ2 + 28 μ2^2 - 5 Φ1 + μ1 (-17 + 10 μ2 - 5 Φ1 + 6 μ2 Φ1)))) -
        (-1 + ηt) θl (-2 × (-52 + 100 μ2^2 + μ2 (53 - 5 Φ1) - 60 Φ1 +
                20 μ1^2 (1 + 4 Φ1) + μ1 (-32 + 261 μ2 - 142 Φ1 + 55 μ2 Φ1)) +
            θp (366 + 67 Φ1 + 25 Φ1^2 + 4 μ2^2 (78 + 27 Φ1 - 43 Φ2) + 11 Φ2 -
                25 Φ1 Φ2 + μ2 (1402 + 209 Φ1 + 25 Φ1^2 + 97 Φ2 - 25 Φ1 Φ2) +
                μ1^2 (408 + 5 Φ1^2 + 45 Φ2 + Φ1 (43 + 3 Φ2)) +
                μ1 (774 + 122 Φ1 + 66 Φ1^2 + 56 Φ2 - 58 Φ1 Φ2 +
                    μ2 (1450 + 49 Φ1 + 25 Φ1^2 + 217 Φ2 - 37 Φ1 Φ2))) +
            η (136 - 276 μ1 - 412 μ1^2 + 39 μ2 - 1865 μ1 μ2 + 28 μ2^2 +
                100 Φ1 + 360 μ1 Φ1 - 136 μ1^2 Φ1 + 25 μ2 Φ1 - 95 μ1 μ2 Φ1 +
                2 θp (446 + 47 Φ1 + 15 Φ1^2 + 2 μ2^2 (74 + 3 Φ1 - 129 Φ2) - 13 Φ2 -
                    15 Φ1 Φ2 + μ2 (1566 + 83 Φ1 + 15 Φ1^2 - Φ2 - 15 Φ1 Φ2) +
                    μ1^2 (452 + 9 Φ1^2 + 37 Φ2 + Φ1 (19 + 3 Φ2)) +
                    μ1 (898 + 102 Φ1 + 60 Φ1^2 + 24 Φ2 - 48 Φ1 Φ2 +
                        μ2 (1422 - 101 Φ1 + 15 Φ1^2 + 151 Φ2 - 51 Φ1 Φ2))))) -
    x^3 (-1 + η)^3 (-2 × (-1 + η) θp (43 + 115 μ1 + 72 μ1^2 + 209 μ2 +
            265 μ1 μ2 + 120 μ2^2 + 23 Φ1 + 29 μ1 Φ1 + 25 μ2 Φ1 +
            7 μ1 μ2 Φ1 + 105 η^5 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
            15 η^4 (7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 4 × (17 + 18 μ2 - 28 μ2^2 +
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                5 Φ1 + 7 μ1^2 (3 + Φ1) + μ1 (38 - 6 μ2 (-3 + Φ1) + 12 Φ1)) ) +
        ηt (-20 + 348 μ2^2 - 82 Φ1 + μ2 (297 + Φ1) + 8 μ1^2 (5 + 13 Φ1) +
            μ1 (20 - 146 Φ1 + μ2 (373 + 115 Φ1)) ) +
        η^2 (ηt (-942 - 483 μ2 + 2564 μ2^2 - 330 Φ1 - 65 μ2 Φ1 - 22 μ1
                (9 + 25 Φ1) + 4 μ1^2 (186 + 53 Φ1) + 5 μ1 μ2 (729 + 167 Φ1) ) +
            2 × (1289 + 560 μ2^2 + 341 Φ1 + 10 μ1^2 (207 + 29 Φ1) + 11 μ2
                (371 + 55 Φ1) + μ1 (3359 + μ2 (4353 - 457 Φ1) + 841 Φ1)) ) +
        10 η^3 (261 + 566 μ2 - 408 μ2^2 + 53 Φ1 + 66 μ2 Φ1 + 48 μ1^2
            (9 + 2 Φ1) + μ1 (693 + 594 μ2 + 185 Φ1 - 114 μ2 Φ1) + 6 ηt
            (-17 - 18 μ2 + 28 μ2^2 - 5 Φ1 + μ1 (-17 + 10 μ2 - 5 Φ1 + 6 μ2 Φ1)) ) +
        2 η (388 + 1596 μ2 + 928 μ2^2 + 143 Φ1 + 226 μ2 Φ1 + μ1^2
            (612 + 44 Φ1) + μ1 (1000 + 1804 μ2 + 247 Φ1 - 32 μ2 Φ1) +
            ηt (μ1^2 (245 + 227 Φ1) + 2 × (-87 + 95 μ2 + 338 μ2^2 - 73 Φ1 -
                13 μ2 Φ1) + μ1 (71 + 1136 μ2 - 294 Φ1 + 274 μ2 Φ1)) ) ) +
    (-1 + ηt) θl (-6 × (-2 + 43 μ2 + 44 μ2^2 + 2 μ1^2 (-7 + Φ1) - 10 Φ1 +
            5 μ2 Φ1 - 2 μ1 (8 + 7 Φ1) + μ1 μ2 (43 + 17 Φ1) ) +
        θp (74 + 37 Φ1 + 15 Φ1^2 + 21 Φ2 - 15 Φ1 Φ2 + 4 μ2^2 (54 + 27 Φ1 + Φ2) +
            μ2 (382 + 159 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) +
            μ1^2 (112 - Φ1^2 + 23 Φ2 + Φ1 (33 + Φ2)) + μ1 (186 + 58 Φ1 + 26 Φ1^2 + 44
                Φ2 - 26 Φ1 Φ2 + μ2 (526 + 127 Φ1 + 15 Φ1^2 + 127 Φ2 - 3 Φ1 Φ2)) ) +
        2 η^2 (-6 × (-56 + 88 μ2^2 + μ2 (37 - 5 Φ1) - 60 Φ1 + μ1^2
                (-27 + 47 Φ1) + μ1 (-83 - 142 Φ1 + μ2 (343 + 55 Φ1)) ) + θp
            (1894 + 351 Φ1 + 125 Φ1^2 + 4 μ2^2 (398 + 147 Φ1 - 203 Φ2) + 71 Φ2 -
                125 Φ1 Φ2 + μ2 (7298 + 1109 Φ1 + 125 Φ1^2 + 549 Φ2 - 125 Φ1 Φ2) +
                μ1^2 (2104 + 25 Φ1^2 + 257 Φ2 + Φ1 (247 + 15 Φ2)) +
                μ1 (3998 + 658 Φ1 + 330 Φ1^2 + 328 Φ2 - 290 Φ1 Φ2 +
                    μ2 (7538 + 373 Φ1 + 125 Φ1^2 + 1213 Φ2 - 185 Φ1 Φ2)) ) ) +
        2 η (160 + 614 μ1 + 454 μ1^2 - 401 μ2 - 353 μ1 μ2 - 588 μ2^2 +
            240 Φ1 + 444 μ1 Φ1 - 66 μ1^2 Φ1 - 15 μ2 Φ1 - 267 μ1 μ2 Φ1 +
            2 θp (298 + 90 Φ1 + 35 Φ1^2 + μ2^2 (482 + 219 Φ1 - 77 Φ2) + 38 Φ2 -
                35 Φ1 Φ2 + μ2 (1292 + 347 Φ1 + 35 Φ1^2 + 207 Φ2 - 35 Φ1 Φ2) +
                μ1^2 (376 + Φ1^2 + 59 Φ2 + Φ1 (73 + 3 Φ2)) +
                μ1 (674 + 151 Φ1 + 72 Φ1^2 + 97 Φ2 - 68 Φ1 Φ2 +
                    μ2 (1532 + 223 Φ1 + 35 Φ1^2 + 307 Φ2 - 23 Φ1 Φ2)) ) ) +
        2 η^3 (128 - 308 μ1 - 436 μ1^2 + 7 μ2 - 2345 μ1 μ2 + 4 μ2^2 +
            100 Φ1 + 360 μ1 Φ1 - 88 μ1^2 Φ1 + 25 μ2 Φ1 - 95 μ1 μ2 Φ1 +
            10 θp (154 + 17 Φ1 + 5 Φ1^2 + μ2^2 (52 + 6 Φ1 - 82 Φ2) - 3 Φ2 -
                5 Φ1 Φ2 + μ2 (546 + 33 Φ1 + 5 Φ1^2 + 5 Φ2 - 5 Φ1 Φ2) +
                μ1^2 (3 Φ1^2 + Φ1 (9 + Φ2) + 3 × (52 + 5 Φ2)) +
                μ1 (μ2 (498 - 23 Φ1 + 5 Φ1^2 + 61 Φ2 - 17 Φ1 Φ2) +
                    2 × (155 + 19 Φ1 + 10 Φ1^2 + 6 Φ2 - 8 Φ1 Φ2)))))) +
x (-1 + η) × (42 η^8 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 6 η^7 θp
    (-81 - 80 μ2 + 168 μ2^2 - 23 Φ1 - 28 μ1^2 (3 + Φ1) +
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    μ1 (-165 - 52 μ2 - 51 Φ1 + 36 μ2 Φ1) +
    7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) - 3 ηt θp
  (4 + 4 μ1^2 + 20 μ2^2 + μ2 (27 + 5 Φ1) + μ1 (8 + μ2 (27 + 5 Φ1))) - 3
  η ((-1 + ηt) θl (4 + 4 μ1^2 + 4 μ2^2 + μ1 (8 - 5 μ2 (-1 + Φ1)) -
        5 μ2 (-1 + Φ1)) + ηt θp (4 + 204 μ2^2 - 40 Φ1 + 4 μ1^2 (-6 + 5 Φ1) +
        7 μ1 μ2 (31 + 9 Φ1) - 4 μ1 (5 + 14 Φ1) + μ2 (209 + 15 Φ1))) + 2
  η^6 θp (651 + 1462 μ2 - 1536 μ2^2 + 115 Φ1 + 198 μ2 Φ1 + 12 μ1^2
      (87 + 17 Φ1) + μ1 (1695 + 1386 μ2 + 427 Φ1 - 378 μ2 Φ1) + 3 ηt
      (-81 - 80 μ2 + 168 μ2^2 - 23 Φ1 + μ1 (-81 + 60 μ2 - 23 Φ1 + 36 μ2 Φ1))) -
η^4 (θp (2 × (603 + 893 μ2 - 2040 μ2^2 + 77 Φ1 + 153 μ2 Φ1 +
            μ1^2 (846 + 202 Φ1) + μ1 (1449 + 565 μ2 + 369 Φ1 - 501 μ2 Φ1)) -
        ηt (206 + 1083 μ2 + 20 μ2^2 - 254 Φ1 - 39 μ2 Φ1 + 4 μ1^2
              (-41 + 120 Φ1) + μ1 (42 + 1075 μ2 - 626 Φ1 + 261 μ2 Φ1))) +
    (-1 + ηt) θl (-2 × (76 μ2^2 + μ2 (21 - 5 Φ1) - 60 × (1 + Φ1) +
            2 μ1^2 (-37 + 7 Φ1) + 5 μ1 μ2 (85 + 11 Φ1) - 2 μ1 (67 + 71 Φ1)) +
        θp (1958 + 367 Φ1 + 125 Φ1^2 + 4 μ2^2 (406 + 159 Φ1 - 191 Φ2) + 87 Φ2 -
            125 Φ1 Φ2 + μ2 (7586 + 1173 Φ1 + 125 Φ1^2 + 613 Φ2 - 125 Φ1 Φ2) +
            μ1^2 (2168 + 25 Φ1^2 + 289 Φ2 + 3 Φ1 (93 + 5 Φ2)) +
            μ1 (4126 + 706 Φ1 + 330 Φ1^2 + 376 Φ2 - 290 Φ1 Φ2 +
                μ2 (7826 + 501 Φ1 + 125 Φ1^2 + 1341 Φ2 - 185 Φ1 Φ2)))))) +
η^5 (θp (892 + 4742 μ2 + 3200 μ2^2 + 324 Φ1 + 814 μ2 Φ1 + 4 μ1^2
          (387 + Φ1) + μ1 (2440 + 5278 μ2 + 532 Φ1 - 206 μ2 Φ1) +
        ηt (-322 + 197 μ2 + 1580 μ2^2 - 150 Φ1 - 65 μ2 Φ1 +
            4 μ1^2 (192 + 41 Φ1) + μ1 (446 + 3765 μ2 - 370 Φ1 + 619 μ2 Φ1))) -
    (-1 + ηt) θl (24 - 68 μ1 - 92 μ1^2 - 5 μ2 - 565 μ1 μ2 - 4 μ2^2 +
        20 Φ1 + 72 μ1 Φ1 - 8 μ1^2 Φ1 + 5 μ2 Φ1 - 19 μ1 μ2 Φ1 +
        2 θp (478 + 55 Φ1 + 15 Φ1^2 + 2 μ2^2 (82 + 15 Φ1 - 117 Φ2) - 5 Φ2 -
            15 Φ1 Φ2 + μ2 (1710 + 115 Φ1 + 15 Φ1^2 + 31 Φ2 - 15 Φ1 Φ2) +
            μ1^2 (484 + 9 Φ1^2 + 53 Φ2 + Φ1 (35 + 3 Φ2)) +
            μ1 (962 + 126 Φ1 + 60 Φ1^2 + 48 Φ2 - 48 Φ1 Φ2 +
                μ2 (1566 - 37 Φ1 + 15 Φ1^2 + 215 Φ2 - 51 Φ1 Φ2))))) - 2
  η^3 (θp (671 + 2637 μ2 + 1240 μ2^2 + 221 Φ1 + 377 μ2 Φ1 + 8 μ1^2
          (126 + 11 Φ1) + μ1 (1679 + 2821 μ2 + 411 Φ1 - 109 μ2 Φ1) +
        ηt (-248 - 351 μ2 + 428 μ2^2 - 46 Φ1 - 55 μ2 Φ1 +
            2 μ1^2 (239 + 77 Φ1) + μ1 (230 + 1657 μ2 - 150 Φ1 + 203 μ2 Φ1))) +
    (-1 + ηt) θl (72 + 322 μ1 + 250 μ1^2 - 59 μ2 - 59 μ1 μ2 -
        140 μ2^2 + 80 Φ1 + 148 μ1 Φ1 + 26 μ1^2 Φ1 - 5 μ2 Φ1 - 89 μ1 μ2 Φ1 +
        2 θp (306 + 92 Φ1 + 35 Φ1^2 + μ2^2 (486 + 225 Φ1 - 71 Φ2) + 40 Φ2 -
            35 Φ1 Φ2 + μ2 (1328 + 355 Φ1 + 35 Φ1^2 + 215 Φ2 - 35 Φ1 Φ2) +
            μ1^2 (384 + Φ1^2 + 63 Φ2 + Φ1 (77 + 3 Φ2)) +
            μ1 (690 + 157 Φ1 + 72 Φ1^2 + 103 Φ2 - 68 Φ1 Φ2 +
                μ2 (1568 + 239 Φ1 + 35 Φ1^2 + 323 Φ2 - 23 Φ1 Φ2))))) + η^2
  (-2 θp (3 × (43 + 72 μ1^2 + 209 μ2 + 120 μ2^2 + 23 Φ1 + 25 μ2 Φ1 +
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                μ1 (115 + 265 μ2 + 29 Φ1 + 7 μ2 Φ1)) +
            ηt (-128 + 313 μ2 + 540 μ2^2 - 186 Φ1 - 27 μ2 Φ1 + 2 μ1^2
                (-73 + 69 Φ1) + μ1 (-274 + 577 μ2 - 354 Φ1 + 243 μ2 Φ1))) +
        3 × (-1 + ηt) θl (40 μ2^2 - 20 × (1 + Φ1) - 28 μ1 (3 + Φ1) -
            8 μ1^2 (8 + Φ1) + 2 μ2 (11 + 5 Φ1) + 2 μ1 μ2 (7 + 17 Φ1) +
            θp (-74 - 37 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2 (54 + 27 Φ1 + Φ2) -
                μ2 (382 + 159 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) + μ1^2 (-112 + Φ1^2 -
                    23 Φ2 - Φ1 (33 + Φ2)) - μ1 (186 + 58 Φ1 + 26 Φ1^2 + 44 Φ2 - 26
                    Φ1 Φ2 + μ2 (526 + 127 Φ1 + 15 Φ1^2 + 127 Φ2 - 3 Φ1 Φ2)))))) -
x^2 (-1 + η)^2 (126 η^7 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 18 η^6 θp
    (7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (32 + 31 μ2 - 70 μ2^2 + 9 Φ1 +
            14 μ1^2 (3 + Φ1) + μ1 (74 + 31 μ2 + 23 Φ1 - 15 μ2 Φ1))) + 2 η^5 θp
    (36 μ1^2 (69 + 13 Φ1) + μ1 (3894 + 3597 μ2 + 968 Φ1 - 765 μ2 Φ1) +
        5 × (282 + 709 μ2 - 564 μ2^2 + 46 Φ1 + 99 μ2 Φ1) +
        18 ηt (-32 - 31 μ2 + 70 μ2^2 - 9 Φ1 + μ1 (-32 - 9 Φ1 + 5 μ2 (5 + 3 Φ1)))) -
    3 (θl μ2 (11 + 8 μ2 + 5 Φ1 + μ1 (11 + 5 Φ1)) + ηt (-θl μ2 (11 + 8 μ2 +
                5 Φ1 + μ1 (11 + 5 Φ1)) + 2 θp (6 + 68 μ2^2 - 10 Φ1 + 5 μ2 (15 + Φ1) +
                μ1^2 (4 + 8 Φ1) + μ1 (10 - 14 Φ1 + μ2 (79 + 17 Φ1))))) - 2
    η^3 (θp (1510 + 3396 μ2 - 2472 μ2^2 + 276 Φ1 + 532 μ2 Φ1 +
            64 μ1^2 (36 + 7 Φ1) + μ1 (3814 + 3116 μ2 + 964 Φ1 - 932 μ2 Φ1) +
            ηt (-404 - 989 μ2 + 584 μ2^2 + μ1^2 (162 - 394 Φ1) + 108 Φ1 +
                13 μ2 Φ1 + μ1 (-242 + 231 μ2 + 332 Φ1 + 13 μ2 Φ1))) +
        (-1 + ηt) θl (2 (μ1^2 (101 - 61 Φ1) + 2 × (58 - 82 μ2^2 + 60 Φ1 +
                    μ2 (-29 + 5 Φ1)) + μ1 (217 + 284 Φ1 - 2 μ2 (384 + 55 Φ1))) +
            θp (1926 + 359 Φ1 + 125 Φ1^2 + 4 μ2^2 (402 + 153 Φ1 - 197 Φ2) +
                79 Φ2 - 125 Φ1 Φ2 + μ2 (7442 + 1141 Φ1 + 125 Φ1^2 + 581 Φ2 - 125
                    Φ1 Φ2) + μ1^2 (2136 + 263 Φ1 + 25 Φ1^2 + 273 Φ2 + 15 Φ1 Φ2) +
                μ1 (4062 + 682 Φ1 + 330 Φ1^2 + 352 Φ2 - 290 Φ1 Φ2 +
                    μ2 (7682 + 437 Φ1 + 125 Φ1^2 + 1277 Φ2 - 185 Φ1 Φ2))))) + η^4
    (2 θp (517 + 3883 μ2 + 4200 μ2^2 + 253 Φ1 + 715 μ2 Φ1 - 20 μ1^2
                (-45 + 7 Φ1) + μ1 (1417 + 4379 μ2 + 263 Φ1 - 11 μ2 Φ1) +
            ηt (-173 + 343 μ2 + 1316 μ2^2 - 105 Φ1 - 65 μ2 Φ1 +
                4 μ1^2 (189 + 47 Φ1) + μ1 (583 + 3435 μ2 - 325 Φ1 + 565 μ2 Φ1))) -
        (-1 + ηt) θl (124 - 324 μ1 - 448 μ1^2 - 9 μ2 - 2585 μ1 μ2 -
            8 μ2^2 + 100 Φ1 + 360 μ1 Φ1 - 64 μ1^2 Φ1 + 25 μ2 Φ1 - 95 μ1 μ2 Φ1 +
            5 θp (470 + 53 Φ1 + 15 Φ1^2 + 8 μ2^2 (20 + 3 Φ1 - 30 Φ2) - 7 Φ2 -
                15 Φ1 Φ2 + μ2 (1674 + 107 Φ1 + 15 Φ1^2 + 23 Φ2 - 15 Φ1 Φ2) +
                μ1^2 (476 + 31 Φ1 + 9 Φ1^2 + 49 Φ2 + 3 Φ1 Φ2) +
                μ1 (946 + 120 Φ1 + 60 Φ1^2 + 42 Φ2 - 48 Φ1 Φ2 +
                    μ2 (1530 - 53 Φ1 + 15 Φ1^2 + 199 Φ2 - 51 Φ1 Φ2))))) - 2
    η^2 (θp (3 × (351 + 1405 μ2 + 744 μ2^2 + 121 Φ1 + 201 μ2 Φ1 +
                μ1^2 (540 + 44 Φ1) + μ1 (891 + 1541 μ2 + 219 Φ1 - 45 μ2 Φ1)) +
            ηt (-446 - 257 μ2 + 1032 μ2^2 - 192 Φ1 - 81 μ2 Φ1 +
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            μ1^2 (622 + 342 Φ1) + μ1 (176 + 2623 μ2 - 444 Φ1 + 477 μ2 Φ1)) ) +
      (-1 + ηt) θl (188 + 790 μ1 + 602 μ1^2 - 289 μ2 - 265 μ1 μ2 -
          504 μ2^2 + 240 Φ1 + 444 μ1 Φ1 + 6 μ1^2 Φ1 - 15 μ2 Φ1 - 267 μ1 μ2 Φ1 +
          3 θp (302 + 91 Φ1 + 35 Φ1^2 + μ2^2 (484 + 222 Φ1 - 74 Φ2) + 39 Φ2 -
              35 Φ1 Φ2 + μ2 (1310 + 35 Φ1^2 + Φ1 (351 - 35 Φ2) + 211 Φ2) +
              μ1^2 (380 + Φ1^2 + 61 Φ2 + 3 Φ1 (25 + Φ2)) +
              μ1 (682 + 72 Φ1^2 + 2 Φ1 (77 - 34 Φ2) + 100 Φ2 +
                  μ2 (1550 + 231 Φ1 + 35 Φ1^2 + 315 Φ2 - 23 Φ1 Φ2))))) + η
    (-2 θp (3 × (43 + 72 μ1^2 + 209 μ2 + 120 μ2^2 + 23 Φ1 + 25 μ2 Φ1 +
              μ1 (115 + 265 μ2 + 29 Φ1 + 7 μ2 Φ1)) +
          2 ηt (-53 + 277 μ2 + 378 μ2^2 - 108 Φ1 - 6 μ2 Φ1 + 4 μ1^2
                (-5 + 27 Φ1) + μ1 (-73 + 397 μ2 - 198 Φ1 + 147 μ2 Φ1)) ) +
      3 × (-1 + ηt) θl (-4 × (6 - 32 μ2^2 + 10 Φ1 + μ1^2 (23 + Φ1) -
              μ2 (27 + 5 Φ1) + μ1 (29 + 14 Φ1 - μ2 (25 + 17 Φ1))) + θp
            (-74 - 37 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2 (54 + 27 Φ1 + Φ2) -
              μ2 (382 + 159 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) + μ1^2 (-112 + Φ1^2 -
                  23 Φ2 - Φ1 (33 + Φ2)) - μ1 (186 + 58 Φ1 + 26 Φ1^2 + 44 Φ2 - 26
                   Φ1 Φ2 + μ2 (526 + 127 Φ1 + 15 Φ1^2 + 127 Φ2 - 3 Φ1 Φ2))))))) +
η θp (-6 η^8 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) + 3 ηt μ2 (11 + 8 μ2 + 5 Φ1 +
      μ1 (11 + 5 Φ1)) + 3 η ηt (80 μ2^2 + 4 μ1^2 (-7 + Φ1) + 5 μ2 (15 + Φ1) -
      4 × (1 + 5 Φ1) - 4 μ1 (8 + 7 Φ1) + μ1 μ2 (75 + 29 Φ1)) + 6 η^7
    (ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (7 + 7 μ2 - 14 μ2^2 + 2 Φ1 +
          2 μ1^2 (3 + Φ1) + μ1 (13 + 3 μ2 + 4 Φ1 - 3 μ2 Φ1)) ) - 2 η^6
    (123 + 251 μ2 - 324 μ2^2 + 23 Φ1 + 33 μ2 Φ1 + 36 μ1^2 (5 + Φ1) +
      μ1 (303 + 219 μ2 + 77 Φ1 - 75 μ2 Φ1) +
      6 ηt (-7 - 7 μ2 + 14 μ2^2 - 2 Φ1 + μ1 (-7 + 5 μ2 - 2 Φ1 + 3 μ2 Φ1)) ) + η^4
    (178 + 394 μ1 + 52 ηt μ1 + 216 μ1^2 + 52 ηt μ1^2 + 28 μ2 - 229 ηt μ2 -
      172 μ1 μ2 - 509 ηt μ1 μ2 - 1112 μ2^2 - 120 ηt μ2^2 + 6 Φ1 +
      80 ηt Φ1 + 102 μ1 Φ1 + 184 ηt μ1 Φ1 + 72 μ1^2 Φ1 - 100 ηt μ1^2 Φ1 +
      16 μ2 Φ1 + 13 ηt μ2 Φ1 - 212 μ1 μ2 Φ1 - 107 ηt μ1 μ2 Φ1 +
      (-1 + ηt) θl (398 + 75 Φ1 + 25 Φ1^2 + 4 μ2^2 (82 + 33 Φ1 - 37 Φ2) +
          19 Φ2 - 25 Φ1 Φ2 + μ2 (1546 + 241 Φ1 + 25 Φ1^2 + 129 Φ2 - 25 Φ1 Φ2) +
          μ1^2 (440 + 5 Φ1^2 + 61 Φ2 + Φ1 (59 + 3 Φ2)) +
          μ1 (838 + 146 Φ1 + 66 Φ1^2 + 80 Φ2 - 58 Φ1 Φ2 +
              μ2 (1594 + 113 Φ1 + 25 Φ1^2 + 281 Φ2 - 37 Φ1 Φ2)))) + η^3
    (4 × (80 + 124 μ2^2 + 25 Φ1 + 44 μ2 (7 + Φ1) + μ1^2 (117 + 11 Φ1) +
              μ1 (197 - 16 μ2 (-20 + Φ1) + 48 Φ1)) -
      θl (310 + 93 Φ1 + 35 Φ1^2 + 4 μ2^2 (122 + 57 Φ1 - 17 Φ2) + 41 Φ2 -
          35 Φ1 Φ2 + μ2 (1346 + 359 Φ1 + 35 Φ1^2 + 219 Φ2 - 35 Φ1 Φ2) +
          μ1^2 (388 + Φ1^2 + 65 Φ2 + Φ1 (79 + 3 Φ2)) +
          μ1 (2 × (349 + 80 Φ1 + 36 Φ1^2 + 53 Φ2 - 34 Φ1 Φ2) +
              μ2 (1586 + 247 Φ1 + 35 Φ1^2 + 331 Φ2 - 23 Φ1 Φ2))) +
      ηt (2 × (56 μ2^2 + 9 × (-5 + Φ1) + 32 μ1^2 (5 + Φ1) - 2 μ2
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                (57 + 7 Φ1) + μ1 (115 - Φ1 + μ2 (406 + 22 Φ1))) +
            θl (310 + 93 Φ1 + 35 Φ1^2 + 4 μ2^2 (122 + 57 Φ1 - 17 Φ2) + 41 Φ2 -
                35 Φ1 Φ2 + μ2 (1346 + 359 Φ1 + 35 Φ1^2 + 219 Φ2 - 35 Φ1 Φ2) +
                μ1^2 (388 + Φ1^2 + 65 Φ2 + Φ1 (79 + 3 Φ2)) +
                μ1 (2 × (349 + 80 Φ1 + 36 Φ1^2 + 53 Φ2 - 34 Φ1 Φ2) +
                    μ2 (1586 + 247 Φ1 + 35 Φ1^2 + 331 Φ2 - 23 Φ1 Φ2)))))) +
        η^5 (-4 × (59 + 110 μ2^2 + 19 Φ1 + μ1^2 (99 + 5 Φ1) + μ1 (158 +
                μ2 (291 - 19 Φ1) + 36 Φ1) + μ2 (267 + 44 Φ1)) -
            θl (162 + 19 Φ1 + 5 Φ1^2 + 4 μ2^2 (14 + 3 Φ1 - 19 Φ2) - Φ2 -
                5 Φ1 Φ2 + μ2 (582 + 41 Φ1 + 5 Φ1^2 + 13 Φ2 - 5 Φ1 Φ2) +
                μ1^2 (164 + 3 Φ1^2 + 19 Φ2 + Φ1 (13 + Φ2)) +
                μ1 (μ2 (534 - 7 Φ1 + 5 Φ1^2 + 77 Φ2 - 17 Φ1 Φ2) +
                    2 × (163 + 22 Φ1 + 10 Φ1^2 + 9 Φ2 - 8 Φ1 Φ2))) +
            ηt (84 - 72 μ1 - 156 μ1^2 - 21 μ2 - 813 μ1 μ2 - 352 μ2^2 +
                36 Φ1 + 80 μ1 Φ1 - 28 μ1^2 Φ1 + 13 μ2 Φ1 - 131 μ1 μ2 Φ1 +
                θl (162 + 19 Φ1 + 5 Φ1^2 + 4 μ2^2 (14 + 3 Φ1 - 19 Φ2) - Φ2 -
                    5 Φ1 Φ2 + μ2 (582 + 41 Φ1 + 5 Φ1^2 + 13 Φ2 - 5 Φ1 Φ2) +
                    μ1^2 (164 + 3 Φ1^2 + 19 Φ2 + Φ1 (13 + Φ2)) +
                    μ1 (μ2 (534 - 7 Φ1 + 5 Φ1^2 + 77 Φ2 - 17 Φ1 Φ2) +
                        2 × (163 + 22 Φ1 + 10 Φ1^2 + 9 Φ2 - 8 Φ1 Φ2))))) +
        η^2 (2 × (43 + 72 μ1^2 + 120 μ2^2 + 23 Φ1 + μ2 (209 + 25 Φ1) +
                μ1 (115 + 29 Φ1 + μ2 (265 + 7 Φ1))) +
            θl (-74 - 37 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2 (54 + 27 Φ1 + Φ2) -
                μ2 (382 + 159 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) + μ1^2
                  (-112 + Φ1^2 - 23 Φ2 - Φ1 (33 + Φ2)) - μ1 (186 + 58 Φ1 + 26 Φ1^2 + 44
                    Φ2 - 26 Φ1 Φ2 + μ2 (526 + 127 Φ1 + 15 Φ1^2 + 127 Φ2 - 3 Φ1 Φ2))) +
            ηt (4 × (-21 + 66 μ2^2 - 7 μ2 (-4 + Φ1) - 26 Φ1 + μ1^2 (-33 + 13 Φ1) +
                μ1 (-54 - 52 Φ1 + μ2 (78 + 32 Φ1))) + θl
                  (74 + 37 Φ1 + 15 Φ1^2 + 21 Φ2 - 15 Φ1 Φ2 + 4 μ2^2 (54 + 27 Φ1 + Φ2) +
                    μ2 (382 + 159 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) + μ1^2 (112 - Φ1^2 +
                        23 Φ2 + Φ1 (33 + Φ2)) + μ1 (186 + 58 Φ1 + 26 Φ1^2 + 44 Φ2 - 26
                          Φ1 Φ2 + μ2 (526 + 127 Φ1 + 15 Φ1^2 + 127 Φ2 - 3 Φ1 Φ2)))))) +
x^4 (-1 + η)^4 (-((-1 + η) θp (210 η^4 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
            30 η^3 (-51 - 54 μ2 + 84 μ2^2 - 15 Φ1 - 28 μ1^2 (3 + Φ1) + μ1 (-135 -
                  82 μ2 - 43 Φ1 + 18 μ2 Φ1) + 7 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
            10 η^2 (348 + 827 μ2 - 408 μ2^2 + 68 Φ1 + 99 μ2 Φ1 + 72 μ1^2
                (9 + 2 Φ1) + μ1 (996 + 951 μ2 + 266 Φ1 - 135 μ2 Φ1) + 9 ηt (-17 -
                  18 μ2 + 28 μ2^2 - 5 Φ1 + μ1 (-17 + 10 μ2 - 5 Φ1 + 6 μ2 Φ1))) +
            2 × (191 + 789 μ2 + 496 μ2^2 + 71 Φ1 + 113 μ2 Φ1 + μ1^2
                (306 + 22 Φ1) + μ1 (497 + 901 μ2 + 123 Φ1 - 13 μ2 Φ1) +
              ηt (-85 + 103 μ2 + 344 μ2^2 - 73 Φ1 - 13 μ2 Φ1 +
                  2 μ1^2 (73 + 65 Φ1) + μ1 (61 + 527 μ2 - 147 Φ1 + 137 μ2 Φ1))) +
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                η (2 × (1232 + 4043 μ2 + 1060 μ2^2 + 328 Φ1 + 605 μ2 Φ1 + 10 μ1^2
                        (207 + 29 Φ1) + μ1 (3302 + 4439 μ2 + 828 Φ1 - 391 μ2 Φ1) ) +
                    ηt (-946 - 499 μ2 + 2552 μ2^2 - 330 Φ1 - 65 μ2 Φ1 + 4 μ1^2 (183 +
                        59 Φ1) + μ1 (-214 + 3405 μ2 - 550 Φ1 + 835 μ2 Φ1) ))))) +
        (-1 + ηt) θl (-2 × (-44 + 224 μ2^2 - 80 Φ1 + μ2 (171 + 5 Φ1) +
            2 μ1^2 (-51 + 23 Φ1) - 2 μ1 (73 + 74 Φ1) + μ1 μ2 (147 + 89 Φ1) ) +
          θp (294 + 89 Φ1 + 35 Φ1^2 + 8 μ2^2 (60 + 27 Φ1 - 10 Φ2) + 37 Φ2 -
            35 Φ1 Φ2 + 7 μ2 (182 + 49 Φ1 + 5 Φ1^2 + 29 Φ2 - 5 Φ1 Φ2) +
            μ1^2 (372 + Φ1^2 + 57 Φ2 + Φ1 (71 + 3 Φ2) ) +
            μ1 (666 + 148 Φ1 + 72 Φ1^2 + 94 Φ2 - 68 Φ1 Φ2 +
                μ2 (1514 + 215 Φ1 + 35 Φ1^2 + 299 Φ2 - 23 Φ1 Φ2) )) +
          η (4 (μ1^2 (7 - 127 Φ1) + 2 × (54 - 94 μ2^2 + 5 μ2 (-9 + Φ1) + 60 Φ1) +
                μ1 (115 + 284 Φ1 - 2 μ2 (302 + 55 Φ1) )) + θp
              (1862 + 343 Φ1 + 125 Φ1^2 + 4 μ2^2 (394 + 141 Φ1 - 209 Φ2) + 63 Φ2 -
                125 Φ1 Φ2 + μ2 (7154 + 1077 Φ1 + 125 Φ1^2 + 517 Φ2 - 125 Φ1 Φ2) +
                μ1^2 (2072 + 25 Φ1^2 + 241 Φ2 + 3 Φ1 (77 + 5 Φ2) ) +
                μ1 (3934 + 634 Φ1 + 330 Φ1^2 + 304 Φ2 - 290 Φ1 Φ2 +
                    μ2 (7394 + 309 Φ1 + 125 Φ1^2 + 1149 Φ2 - 185 Φ1 Φ2) )))) +
          η^2 (264 - 584 μ1 - 848 μ1^2 + 46 μ2 - 4210 μ1 μ2 + 32 μ2^2 +
            200 Φ1 + 720 μ1 Φ1 - 224 μ1^2 Φ1 + 50 μ2 Φ1 - 190 μ1 μ2 Φ1 +
            5 θp (454 + 49 Φ1 + 15 Φ1^2 + 4 μ2^2 (38 + 3 Φ1 - 63 Φ2) - 11 Φ2 -
                15 Φ1 Φ2 + μ2 (1602 + 91 Φ1 + 15 Φ1^2 + 7 Φ2 - 15 Φ1 Φ2) +
                μ1^2 (460 + 9 Φ1^2 + 41 Φ2 + Φ1 (23 + 3 Φ2) ) +
                μ1 (914 + 108 Φ1 + 60 Φ1^2 + 30 Φ2 - 48 Φ1 Φ2 +
                    μ2 (1458 + 15 Φ1^2 + 167 Φ2 - 17 Φ1 (5 + 3 Φ2) )))))))) -
(x + η - x η)^2 (-2 x^6 (-1 + η)^6 θp (2 - 2 θl - 25 μ1 + 13 θl μ1 - 27 μ1^2 +
        15 θl μ1^2 + 12 μ2 - 12 θl μ2 - 44 μ1 μ2 + 28 θl μ1 μ2 + 2
         Φ1 - 2 θl Φ1 - 9 μ1 Φ1 + 5 θl μ1 Φ1 - 5 μ1^2 Φ1 + θl
         μ1^2 Φ1 + 2 ηt (4 + 8 μ2 + Φ1 + μ1 (4 + Φ1) ) + 2 η^2
         (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1) ) - η (14 - 13 μ1 - 27 μ1^2 + 44 μ2 -
            44 μ1 μ2 - 4 θl (1 + μ1 + 4 μ2) + 4 Φ1 - 7 μ1 Φ1 - 5 μ1^2 Φ1 +
            2 ηt (4 + 8 μ2 + 2 θl (1 + μ1 + 4 μ2) + Φ1 + μ1 (4 + Φ1) ) ) - ηt
         θl (-2 - 2 Φ1 + μ1^2 (15 + Φ1) + μ1 (13 + 28 μ2 + 5 Φ1) +
            4 μ2 (-3 + Φ2) ) + 4 θl μ2 Φ2) +
    x^5 (-1 + η)^5 (4 × (-1 + ηt) θl (4 μ2 + μ1^2 (3 + Φ1 + η (9 + Φ1) ) +
            μ1 (3 + 12 μ2 - 5 Φ1 + η (9 + 28 μ2 + Φ1) ) ) + θp
         (-10 + 10 θl - 136 μ1 + 94 θl μ1 - 126 μ1^2 + 84 θl μ1^2 - 18 μ2 +
            26 θl μ2 - 242 μ1 μ2 + 202 θl μ1 μ2 - 80 μ2^2 + 64 θl μ2^2 - 2 Φ1 +
            2 θl Φ1 - 44 μ1 Φ1 + 11 θl μ1 Φ1 - 18 μ1^2 Φ1 - 3 θl μ1^2 Φ1 -
            18 μ2 Φ1 + 10 θl μ2 Φ1 - 6 μ1 μ2 Φ1 - 38 θl μ1 μ2 Φ1 +
            9 θl μ1 Φ1^2 + 3 θl μ1^2 Φ1^2 + 24 η^3 (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1) ) -
            4 η^2 (30 - 51 μ1 - 81 μ1^2 + 110 μ2 - 122 μ1 μ2 + 28 μ2^2 -
                12 θl (1 + μ1 + 4 μ2) + 10 Φ1 - 23 μ1 Φ1 - 15 μ1^2 Φ1 + 6 μ1 μ2 Φ1 +
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            6 ηt (4 + 8 μ2 + 2 θl (1 + μ1 + 4 μ2) + Φ1 + μ1 (4 + Φ1))) +
        3 θl μ1 Φ2 + 3 θl μ1^2 Φ2 + 8 θl μ2 Φ2 - 40 θl μ2^2 Φ2 -
        5 θl μ1 Φ1 Φ2 + θl μ1^2 Φ1 Φ2 - 12 θl μ1 μ2 Φ1 Φ2 -
        ηt (-32 - 44 μ2 + 56 μ2^2 - 8 Φ1 + 4 μ1 (-2 × (4 + Φ1) + μ2 (5 + 3 Φ1)) +
            θl μ1^2 (3 Φ1^2 + Φ1 (-3 + Φ2) + 3 × (28 + Φ2)) +
            2 θl (5 + Φ1 + μ2 (13 + 5 Φ1 + 4 Φ2) - 4 μ2^2 (-8 + 5 Φ2)) + θl μ1
              (94 + 202 μ2 + 9 Φ1^2 + Φ1 (11 - 5 Φ2) + 3 Φ2 - 2 μ2 Φ1 (19 + 6 Φ2))) +
        η (4 ηt (37 μ2 + 14 μ2^2 + 4 × (4 + Φ1) + 4 μ1 (4 + Φ1) + μ1 μ2 (5 + 3 Φ1)) -
            2 × (7 - 96 μ2^2 - 9 Φ1 + 3 μ1^2 (33 + 7 Φ1) - μ2 (37 + 9 Φ1) + μ1
                (106 + 36 Φ1 - 3 μ2 (-41 + 5 Φ1))) + θl (-8 × (1 + 3 Φ1) + 2 μ2
                (-41 + Φ1 + 24 Φ2) + μ1^2 (Φ1^2 + 9 × (22 + Φ2) + Φ1 (23 + Φ2)) +
               μ1 (190 + Φ1^2 + 9 Φ2 + Φ1 (71 + Φ2) + 2 μ2 (195 + 9 Φ1 + 14 Φ2))) -
            ηt θl (-8 × (1 + 3 Φ1) + 2 μ2 (-41 + Φ1 + 24 Φ2) +
               μ1^2 (Φ1^2 + 9 × (22 + Φ2) + Φ1 (23 + Φ2)) + μ1 (190 + Φ1^2 +
                 9 Φ2 + Φ1 (71 + Φ2) + 2 μ2 (195 + 9 Φ1 + 14 Φ2)))))) -
x^2 (-1 + η)^2 ((-1 + η) θp (60 η^5 (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1)) +
        2 ηt (4 μ2^2 - 15 × (1 + Φ1) - μ2 (11 + 5 Φ1) - 2 μ1 (9 + 8 Φ1) +
            μ1^2 (-3 + 11 Φ1) + μ1 μ2 (-15 + 19 Φ1)) -
        10 η^4 (-42 - 52 μ2 + 112 μ2^2 - 2 Φ1 - 3 μ1^2 (27 + 5 Φ1) + μ1 (-123 -
                92 μ2 - 35 Φ1 + 24 μ2 Φ1) + 6 ηt (4 + 8 μ2 + Φ1 + μ1 (4 + Φ1))) +
        12 η^2 (25 + 103 μ2 + 136 μ2^2 + 13 Φ1 + 19 μ2 Φ1 + 2 μ1^2 (27 + Φ1) +
            μ1 (79 + 21 Φ1 + μ2 (159 + Φ1)) + 2 ηt (-4 + 2 μ2 + 14 μ2^2 - Φ1 -
                μ2 Φ1 + 2 μ1^2 (6 + Φ1) + μ1 (8 + 46 μ2 - 5 Φ1 + 8 μ2 Φ1))) +
        η (ηt (-68 + 24 μ2^2 - 60 Φ1 + 8 μ1^2 (-1 + 13 Φ1) - μ2 (5 + 27 Φ1) +
                μ1 (-76 - 93 μ2 - 148 Φ1 + 117 μ2 Φ1)) +
            4 × (88 μ2^2 - 3 μ1^2 (-9 + Φ1) + 8 μ2 (13 + Φ1) +
                3 × (9 + 5 Φ1) + 2 μ1 (27 + 6 Φ1 + μ2 (52 + 7 Φ1)))) +
        4 η^3 (61 + 75 μ2 - 40 μ2^2 + 11 Φ1 + 51 μ2 Φ1 + 45 μ1^2 (7 + Φ1) +
            μ1 (376 + 539 μ2 + 116 Φ1 - 51 μ2 Φ1) +
            2 ηt (-55 μ2 + 70 μ2^2 - 10 × (4 + Φ1) + 3 μ1^2 (9 + Φ1) +
                μ1 (-13 - 7 Φ1 + μ2 (109 + 15 Φ1))))) -
    (-1 + ηt) θl (10 + 20 μ1 + 10 μ1^2 + 11 μ2 + 11 μ1 μ2 + 8 μ2^2 +
        120 η^5 θp (1 + μ1 + 4 μ2) + 10 Φ1 + 8 μ1 Φ1 - 2 μ1^2 Φ1 + 5 μ2 Φ1 -
        19 μ1 μ2 Φ1 - θp (μ1^2 (-5 + Φ1) × (-2 + Φ1 - Φ2) - 2 μ1 (5 + 2 Φ1) ×
              (-2 + Φ1 - Φ2) + 8 μ2^2 (2 + Φ2) + 5 × (2 + Φ1 - Φ1^2 + Φ2 + Φ1 Φ2) +
            μ1 μ2 (-5 Φ1^2 + 11 × (2 + Φ2) - 7 Φ1 (3 + Φ2)) +
            μ2 (-5 Φ1^2 + 11 × (2 + Φ2) + Φ1 (3 + 5 Φ2))) + 2 η^4
          (-8 μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 5 θp (μ1^2 (Φ1^2 + 9 × (7 + Φ2) +
                Φ1 (14 + Φ2)) + 2 × (5 - 3 Φ1 + μ2 (13 + Φ1 + 6 Φ2)) + μ1
                (73 + Φ1^2 + 9 Φ2 + Φ1 (26 + Φ2) + 2 μ2 (69 + 9 Φ1 + 14 Φ2)))) +
        4 η^3 (-4 × (4 μ2 + μ1 (9 + 36 μ2 - 5 Φ1) + μ1^2 (9 + Φ1)) +
            θp (37 + 5 Φ1 + 2 μ2 (61 + 14 Φ1 + 10 Φ2) - 4 μ2^2 (-34 + 25 Φ2) +
                μ1^2 (249 + 15 Φ1 + 9 Φ1^2 + 27 Φ2 + 4 Φ1 Φ2) +
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                μ1 (286 + 50 Φ1 + 24 Φ1^2 + 27 Φ2 - 11 Φ1 Φ2 +
                    μ2 (646 - 44 Φ1 + 66 Φ2 - 30 Φ1 Φ2))))) +
        η^2 (76 + 49 μ2 - 28 μ1^2 (-7 + Φ1) + 60 Φ1 + 15 μ2 Φ1 +
            μ1 (272 + 321 μ2 + 164 Φ1 - 57 μ2 Φ1) + 3 θp
              (μ1^2 (142 + 9 Φ1^2 + 5 Φ2 + Φ1 (-9 + 5 Φ2)) + μ1 (194 - 7 Φ1 + 43 Φ1^2 -
                    Φ2 - 29 Φ1 Φ2 + 2 μ2 (243 - 40 Φ1 + 5 Φ1^2 - Φ2 - 17 Φ1 Φ2)) +
                2 × (26 + 13 Φ1 + 5 Φ1^2 + 2 μ2^2 (54 + 3 Φ1 - 41 Φ2) - 3 Φ2 -
                    5 Φ1 Φ2 + μ2 (127 + 24 Φ1 + 5 Φ1^2 - 11 Φ2 - 5 Φ1 Φ2)))) +
        2 η (2 × (17 + 2 μ2^2 + 15 Φ1 + μ1^2 (25 + Φ1) + μ2 (19 + 5 Φ1) +
                μ1 (42 + μ2 (31 - 19 Φ1) + 16 Φ1)) +
            θp (5 + 4 Φ1 + 15 Φ1^2 + 4 μ2^2 (16 + 3 Φ1 - 18 Φ2) - 11 Φ2 -
                15 Φ1 Φ2 + μ2 (82 + 21 Φ1 + 15 Φ1^2 - 29 Φ2 - 15 Φ1 Φ2) + μ1^2 (9 +
                    Φ1^2 - 9 Φ2 + Φ1 (11 + 4 Φ2)) + μ1 (14 - 3 Φ1 + 25 Φ1^2 - 20 Φ2 -
                    20 Φ1 Φ2 + μ2 (94 + 15 Φ1^2 - 23 Φ2 + 3 Φ1 (7 + Φ2))))))) +
x (-1 + η) × (24 η^7 θp (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1)) - 4 η^6 θp
    (-18 - 99 μ1 - 81 μ1^2 + 22 μ2 - 82 μ1 μ2 + 140 μ2^2 -
      12 θl (1 + μ1 + 4 μ2) + 2 Φ1 - 31 μ1 Φ1 - 15 μ1^2 Φ1 + 30 μ1 μ2 Φ1 +
      6 ηt (4 + 8 μ2 + 2 θl (1 + μ1 + 4 μ2) + Φ1 + μ1 (4 + Φ1))) + ηt
    θp (-((2 + μ2) × (-3 + 4 μ2 - 5 Φ1)) - 2 μ1^2 (-3 + Φ1) +
      μ1 (12 + 8 Φ1 - μ2 (5 + 19 Φ1))) + η^5
    (4 × (-1 + ηt) θl μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
      θp (2 × (160 μ2^2 + 5 × (-7 + Φ1) + 3 μ1^2 (51 + 5 Φ1) +
              μ1 (118 + μ2 (353 - 13 Φ1) + 44 Φ1) + μ2 (-63 + 53 Φ1)) +
          4 ηt (-7 μ2 + 70 μ2^2 - 4 × (4 + Φ1) + 4 μ1^2 (9 + Φ1) + μ1 (20 + μ2
                (137 + 15 Φ1))) + θl (56 - 24 Φ1 + 2 μ2 (83 + 5 Φ1 + 24 Φ2) +
              μ1^2 (5 Φ1^2 + 45 × (6 + Φ2) + Φ1 (67 + 5 Φ2)) + μ1 (326 +
                5 Φ1^2 + 45 Φ2 + 5 Φ1 (23 + Φ2) + 2 μ2 (303 + 45 Φ1 + 70 Φ2))) -
          ηt θl (56 - 24 Φ1 + 2 μ2 (83 + 5 Φ1 + 24 Φ2) + μ1^2
                (5 Φ1^2 + 45 × (6 + Φ2) + Φ1 (67 + 5 Φ2)) + μ1 (326 + 5 Φ1^2 +
                45 Φ2 + 5 Φ1 (23 + Φ2) + 2 μ2 (303 + 45 Φ1 + 70 Φ2))))) -
    η^3 (θp (92 + 4 × (176 + 47 ηt) μ2^2 + 44 Φ1 + 44 ηt Φ1 + 4 μ1^2
              (81 + ηt (72 - 11 Φ1) + 7 Φ1) +
            μ2 (420 + 21 ηt + 124 Φ1 + 11 ηt Φ1) + μ1 (416 + 868 μ2 +
                120 Φ1 - 68 μ2 Φ1 + 72 ηt (4 + Φ1) + 11 ηt μ2 (87 + Φ1))) +
        (-1 + ηt) θl (24 + 84 μ1^2 + 11 μ2 - 4 μ2^2 + 20 Φ1 + 5 μ2 Φ1 + μ1
              (108 + 107 μ2 + 56 Φ1 - 19 μ2 Φ1) + θp (4 μ2^2 (106 + 9 Φ1 - 79 Φ2) +
                2 μ2 (279 + 10 Φ1^2 + Φ1 (55 - 10 Φ2) - 14 Φ2) +
                4 × (28 + 5 Φ1^2 + Φ1 (14 - 5 Φ2) - 2 Φ2) + μ1^2 (290 + 17 Φ1^2 +
                    13 Φ2 + Φ1 (-17 + 9 Φ2)) + μ1 (402 - 9 Φ1 + 85 Φ1^2 + 5 Φ2 -
                    59 Φ1 Φ2 + 2 μ2 (515 - 65 Φ1 + 10 Φ1^2 + 8 Φ2 - 34 Φ1 Φ2))))) +
    η (ηt θp (46 - 36 μ2^2 + μ1^2 (38 - 18 Φ1) + 50 Φ1 + μ2 (17 + 15 Φ1) +
            μ1 (84 + μ2 (49 - 57 Φ1) + 56 Φ1)) + (-1 + ηt) θl
          ((2 + μ2) × (-3 + 4 μ2 - 5 Φ1) + 2 μ1^2 (-3 + Φ1) + μ1 (-12 +
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                5 μ2 - 8 Φ1 + 19 μ2 Φ1) + 2 θp (6 + 3 Φ1 - 5 Φ1^2 + 3 Φ2 + 5 Φ1 Φ2 +
                μ2^2 (4 - 6 Φ1 + 2 Φ2) + μ2 (6 - 5 Φ1 - 5 Φ1^2 + 3 Φ2 + 5 Φ1 Φ2) +
                μ1^2 (Φ1^2 + 3 × (2 + Φ2) - Φ1 (9 + Φ2)) + μ1 (12 - 6 Φ1 - 4 Φ1^2 +
                    6 Φ2 + 4 Φ1 Φ2 + μ2 (6 - 29 Φ1 - 5 Φ1^2 + 3 Φ2 - 7 Φ1 Φ2)))))) +
        η^4 (4 × (-1 + ηt) θl (4 μ2 + μ1 (11 + 44 μ2 - 5 Φ1) + μ1^2 (11 + Φ1)) +
            θp (4 ηt (-14 μ2^2 + μ2 (63 - 4 Φ1) + 6 × (4 + Φ1) +
                4 μ1^2 (5 + Φ1) + μ1 (44 - 14 Φ1 + μ2 (79 + 17 Φ1))) +
                2 × (27 + 632 μ2^2 + 39 Φ1 + μ2 (343 + 23 Φ1) - μ1^2 (99 + 37 Φ1) +
                μ1 (-72 - 34 Φ1 + μ2 (135 + 77 Φ1))) + θl (82 + 10 Φ1 -
                8 μ2^2 (-32 + 25 Φ2) + μ2 (282 + 58 Φ1 + 40 Φ2) + μ1^2 (524 +
                    19 Φ1^2 + 67 Φ2 + 9 Φ1 (5 + Φ2)) + μ1 (606 + 115 Φ1 + 49 Φ1^2 +
                    67 Φ2 - 21 Φ1 Φ2 - 2 μ2 (-693 + 27 Φ1 - 88 Φ2 + 30 Φ1 Φ2))) -
                ηt θl (82 + 10 Φ1 - 8 μ2^2 (-32 + 25 Φ2) + μ2 (282 + 58 Φ1 +
                    40 Φ2) + μ1^2 (524 + 19 Φ1^2 + 67 Φ2 + 9 Φ1 (5 + Φ2)) +
                μ1 (606 + 115 Φ1 + 49 Φ1^2 + 67 Φ2 - 21 Φ1 Φ2 -
                    2 μ2 (-693 + 27 Φ1 - 88 Φ2 + 30 Φ1 Φ2)))))) -
        η^2 (θp (4 × (27 + 109 μ2 + 80 μ2^2 - 3 μ1^2 (-9 + Φ1) + 15 Φ1 +
                7 μ2 Φ1 + μ1 (54 + 109 μ2 + 12 Φ1 + 19 μ2 Φ1)) +
                ηt (-12 + 23 μ2 - 4 μ2^2 - 7 μ2 Φ1 + 4 μ1^2 (-5 + 14 Φ1) +
                μ1 (-32 - 49 μ2 - 88 Φ1 + 41 μ2 Φ1))) +
            (-1 + ηt) θl (2 × (-4 μ2^2 + μ1 μ2 (27 - 19 Φ1) + 15 × (1 + Φ1) +
                16 μ1 (3 + Φ1) + μ2 (11 + 5 Φ1) + μ1^2 (33 + 7 Φ1)) +
                θp (μ1^2 (24 + Φ1^2 - 15 Φ2 + Φ1 (23 + 7 Φ2)) + 2 ×
                    (13 + 8 Φ1 + 15 Φ1^2 + 4 μ2^2 (20 + 6 Φ1 - 15 Φ2) - 7 Φ2 -
                    15 Φ1 Φ2 + μ2 (119 + 36 Φ1 + 15 Φ1^2 - 13 Φ2 - 15 Φ1 Φ2)) +
                μ1 (50 + 3 Φ1 + 49 Φ1^2 - 29 Φ2 - 41 Φ1 Φ2 + μ2
                    (238 + 30 Φ1^2 - 26 Φ2 + 6 Φ1 (12 + Φ2)))))))) -
    η θp (4 η^7 (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1)) - 2 η^6 (-10 - 37 μ1 - 27 μ1^2 -
        24 μ1 μ2 + 56 μ2^2 - 4 θl (1 + μ1 + 4 μ2) - 11 μ1 Φ1 - 5 μ1^2 Φ1 +
        12 μ1 μ2 Φ1 + 2 ηt (4 + 8 μ2 + 2 θl (1 + μ1 + 4 μ2) + Φ1 + μ1 (4 + Φ1))) +
        ηt (2 - 16 μ2^2 - 2 μ1^2 (-1 + Φ1) + 10 Φ1 + μ2 (-21 + 5 Φ1) +
        μ1 (4 + 8 Φ1 - μ2 (21 + 19 Φ1))) + η^5
         (2 × (-5 + 16 μ2^2 + Φ1 + 4 μ1^2 (9 + Φ1) + μ2 (-13 + 11 Φ1) +
                μ1 (31 + μ2 (75 - 7 Φ1) + 11 Φ1)) + 4 ηt
            (-4 - 3 μ2 + 14 μ2^2 - Φ1 + μ1^2 (9 + Φ1) + μ1 (5 + 3 μ2 (11 + Φ1))) +
        θl (μ1^2 (48 + Φ1^2 + 9 Φ2 + Φ1 (13 + Φ2)) +
                2 × (6 - 2 Φ1 + μ2 (19 + Φ1 + 4 Φ2)) +
                μ1 (60 + Φ1^2 + 9 Φ2 + Φ1 (21 + Φ2) + 2 μ2 (55 + 9 Φ1 + 14 Φ2))) -
        ηt θl (μ1^2 (48 + Φ1^2 + 9 Φ2 + Φ1 (13 + Φ2)) +
                2 × (6 - 2 Φ1 + μ2 (19 + Φ1 + 4 Φ2)) +
                μ1 (60 + Φ1^2 + 9 Φ2 + Φ1 (21 + Φ2) + 2 μ2 (55 + 9 Φ1 + 14 Φ2)))) -
        η^3 (2 × (7 + 72 μ2^2 + 3 Φ1 + 4 μ1^2 (9 + Φ1) + 5 μ2 (7 + 3 Φ1) +
                μ1 (43 + μ2 (91 - 15 Φ1) + 13 Φ1)) -
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        θl (30 + 15 Φ1 + 5 Φ1^2 + 4 μ2^2 (26 + 3 Φ1 - 19 Φ2) - Φ2 -
            5 Φ1 Φ2 + 2 μ1^2 (37 + 2 Φ1^2 + Φ1 (-2 + Φ2) + 2 Φ2) +
            μ2 (152 + 31 Φ1 + 5 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2) + μ1 (104 - Φ1 + 21 Φ1^2 +
                3 Φ2 - 15 Φ1 Φ2 + μ2 (272 - 25 Φ1 + 5 Φ1^2 + 9 Φ2 - 17 Φ1 Φ2))) +
        ηt (4 + 108 μ1 + 104 μ1^2 - μ2 + 279 μ1 μ2 + 40 μ2^2 + 16 Φ1 +
            32 μ1 Φ1 - 8 μ1^2 Φ1 + 5 μ2 Φ1 - 7 μ1 μ2 Φ1 +
            θl (30 + 15 Φ1 + 5 Φ1^2 + 4 μ2^2 (26 + 3 Φ1 - 19 Φ2) - Φ2 - 5 Φ1 Φ2 +
                2 μ1^2 (37 + 2 Φ1^2 + Φ1 (-2 + Φ2) + 2 Φ2) + μ2 (152 + 31 Φ1 +
                    5 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2) + μ1 (104 - Φ1 + 21 Φ1^2 + 3 Φ2 -
                    15 Φ1 Φ2 + μ2 (272 - 25 Φ1 + 5 Φ1^2 + 9 Φ2 - 17 Φ1 Φ2)))))) -
    2 η^4 (-8 + μ1 + 9 μ1^2 - 92 μ2 - 68 μ1 μ2 - 160 μ2^2 - 10 Φ1 +
        3 μ1 Φ1 + 7 μ1^2 Φ1 - 8 μ2 Φ1 - 20 μ1 μ2 Φ1 -
        θl (9 + Φ1 + μ2 (32 + 6 Φ1 + 4 Φ2) - 4 μ2^2 (-6 + 5 Φ2) +
            μ1^2 (55 + 2 Φ1^2 + 8 Φ2 + Φ1 (6 + Φ2)) + μ1 (64 + 13 Φ1 + 5 Φ1^2 +
                8 Φ2 - 2 Φ1 Φ2 - 2 μ2 (-74 + Φ1 - 11 Φ2 + 3 Φ1 Φ2))) +
        ηt (-2 × (4 - μ2 (-13 + Φ1) + Φ1 + μ1^2 (7 + Φ1) + μ1
                (11 - 4 Φ1 + μ2 (29 + 5 Φ1))) +
            θl (9 + Φ1 + μ2 (32 + 6 Φ1 + 4 Φ2) - 4 μ2^2 (-6 + 5 Φ2) +
                μ1^2 (55 + 2 Φ1^2 + 8 Φ2 + Φ1 (6 + Φ2)) + μ1 (64 + 13 Φ1 + 5 Φ1^2 +
                    8 Φ2 - 2 Φ1 Φ2 - 2 μ2 (-74 + Φ1 - 11 Φ2 + 3 Φ1 Φ2)))))) +
    η (θl (-2 - Φ1 + 5 Φ1^2 - Φ2 - 5 Φ1 Φ2 + 4 μ2^2 (2 + 3 Φ1 + Φ2) +
            μ2 (10 + 13 Φ1 + 5 Φ1^2 + 5 Φ2 - 5 Φ1 Φ2) -
            μ1^2 (2 + Φ1^2 + Φ2 - Φ1 (11 + Φ2)) + μ1 (-4 + 10 Φ1 + 4 Φ1^2 -
                2 Φ2 - 4 Φ1 Φ2 + μ2 (10 + 37 Φ1 + 5 Φ1^2 + 5 Φ2 + 7 Φ1 Φ2))) +
        ηt (20 + 56 μ1 + 36 μ1^2 + 11 μ2 + 35 μ1 μ2 - 16 μ2^2 + 20 Φ1 +
            24 μ1 Φ1 + 4 μ1^2 Φ1 + 5 μ2 Φ1 - 19 μ1 μ2 Φ1 +
            θl (2 + Φ1 - 5 Φ1^2 + Φ2 + 5 Φ1 Φ2 - 4 μ2^2 (2 + 3 Φ1 + Φ2) -
                μ2 (10 + 13 Φ1 + 5 Φ1^2 + 5 Φ2 - 5 Φ1 Φ2) +
                μ1^2 (2 + Φ1^2 + Φ2 - Φ1 (11 + Φ2)) - μ1 (-4 + 10 Φ1 + 4 Φ1^2 - 2 Φ2 -
                    4 Φ1 Φ2 + μ2 (10 + 37 Φ1 + 5 Φ1^2 + 5 Φ2 + 7 Φ1 Φ2))))) - η^2
      (-2 × (2 × (-9 - 24 μ2^2 + μ1^2 (-9 + Φ1) - 5 Φ1 - 2 μ2 (19 + Φ1) -
                2 μ1 (9 + 2 Φ1 + μ2 (19 + 4 Φ1))) +
            θl (7 + 4 Φ1 + 5 Φ1^2 + 4 μ2^2 (8 + 3 Φ1 - 4 Φ2) - Φ2 -
                5 Φ1 Φ2 + μ2 (52 + 17 Φ1 + 5 Φ1^2 + Φ2 - 5 Φ1 Φ2) +
                μ1^2 (5 - 2 Φ2 + Φ1 (4 + Φ2)) + μ1 (12 + 2 Φ1 + 8 Φ1^2 - 3 Φ2 -
                    7 Φ1 Φ2 + μ2 (48 + 5 Φ1^2 - Φ2 + Φ1 (17 + Φ2))))) +
        ηt (2 - 2 μ1^2 - μ2 - 17 μ1 μ2 - 16 μ2^2 + 10 Φ1 - 20 μ1 Φ1 + 18 μ1^2 Φ1 +
            μ2 Φ1 + μ1 μ2 Φ1 + 2 θl (7 + 4 Φ1 + 5 Φ1^2 + 4 μ2^2 (8 + 3 Φ1 - 4 Φ2) -
                Φ2 - 5 Φ1 Φ2 + μ2 (52 + 17 Φ1 + 5 Φ1^2 + Φ2 - 5 Φ1 Φ2) +
                μ1^2 (5 - 2 Φ2 + Φ1 (4 + Φ2)) + μ1 (12 + 2 Φ1 + 8 Φ1^2 - 3 Φ2 -
                    7 Φ1 Φ2 + μ2 (48 + 5 Φ1^2 - Φ2 + Φ1 (17 + Φ2)))))))) +
x^4 (-1 + η)^4 (-2 × (-1 + η) θp (25 + 79 μ1 + 54 μ1^2 + 95 μ2 + 151 μ1 μ2 +
        152 μ2^2 + 13 Φ1 + 21 μ1 Φ1 + 2 μ1^2 Φ1 + 19 μ2 Φ1 + μ1 μ2 Φ1 +
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30 η^3 (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1)) - 5 η^2 (2 × (-9 - 4 μ2 + 28 μ2^2 + Φ1) -
    3 μ1^2 (27 + 5 Φ1) + 6 ηt (4 + 8 μ2 + Φ1 + μ1 (4 + Φ1)) +
    μ1 (-99 - 31 Φ1 + 4 μ2 (-28 + 3 Φ1))) + 2 ηt (-4 + 14 μ2^2 -
    μ2 (-2 + Φ1) - Φ1 + 2 μ1^2 (4 + Φ1) + μ1 (4 - 5 Φ1 + μ2 (30 + 8 Φ1))) +
  η (37 + 55 μ2 + 120 μ2^2 + 7 Φ1 + 47 μ2 Φ1 + 45 μ1^2 (7 + Φ1) +
    μ1 (352 + 583 μ2 + 112 Φ1 - 7 μ2 Φ1) + 2 ηt (-55 μ2 + 70 μ2^2 - 10 ×
        (4 + Φ1) + μ1^2 (9 + Φ1) + μ1 (-31 - 9 Φ1 + μ2 (53 + 15 Φ1))))) +
(-1 + ηt) θl (28 + 27 μ2 - 64 η μ2 + 8 μ2^2 + 20 Φ1 + 5 μ2 Φ1 -
    4 μ1^2 (7 × (-1 + Φ1) + 4 η (5 + Φ1) + 4 η^2 (9 + Φ1)) -
    μ1 (-56 + 80 η (1 + 4 μ2 - Φ1) - 52 Φ1 +
    16 η^2 (9 + 28 μ2 + Φ1) + μ2 (-107 + 19 Φ1)) +
    θp (22 + 102 μ2 + 112 μ2^2 + 120 η^3 (1 + μ1 + 4 μ2) + 11 Φ1 +
    17 μ2 Φ1 + 5 Φ1^2 + 5 μ2 Φ1^2 - 5 Φ2 - 19 μ2 Φ2 - 88 μ2^2 Φ2 -
    5 Φ1 Φ2 - 5 μ2 Φ1 Φ2 + μ1^2 (68 + 5 Φ1^2 + Φ2 + Φ1 (-5 + 3 Φ2)) +
    5 η^2 (μ1^2 (Φ1^2 + 9 × (12 + Φ2) + Φ1 (17 + Φ2)) +
        2 × (2 - 6 Φ1 + μ2 (-5 + Φ1 + 12 Φ2)) +
        μ1 (112 + Φ1^2 + 9 Φ2 + Φ1 (41 + Φ2) + 2 μ2 (111 + 9 Φ1 + 14 Φ2))) +
    μ1 (90 + 22 Φ1^2 - 4 Φ2 - 2 Φ1 (3 + 7 Φ2) + μ2
        (214 + 5 Φ1^2 - 11 Φ2 - Φ1 (55 + 17 Φ2))) +
    2 η (29 + 5 Φ1 + μ2 (84 + 26 Φ1 + 20 Φ2) - 4 μ2^2 (-38 + 25 Φ2) +
        μ1^2 (223 + 8 Φ1^2 + 14 Φ2 + 3 Φ1 Φ2) + μ1 (252 + 35 Φ1 + 23 Φ1^2 +
            14 Φ2 - 12 Φ1 Φ2 + μ2 (552 + 22 Φ2 - 6 Φ1 (13 + 5 Φ2))))))) -
x^3 (-1 + η)^3 (-((-1 + η) θp (80 η^4 (6 + 16 μ2 + Φ1 + μ1 (6 + Φ1)) +
        ηt (4 μ2^2 - 4 × (6 + 5 Φ1) - μ2 (7 + 9 Φ1) +
            4 μ1^2 (4 + 11 Φ1) + μ1 (-8 - 31 μ2 - 48 Φ1 + 39 μ2 Φ1)) -
        40 η^3 (2 × (-5 - 5 μ2 + 14 μ2^2) - μ1^2 (27 + 5 Φ1) + μ1 (-37 -
                34 μ2 - 11 Φ1 + 6 μ2 Φ1) + 2 ηt (4 + 8 μ2 + Φ1 + μ1 (4 + Φ1))) +
        4 × (9 + 32 μ2^2 - μ1^2 (-9 + Φ1) + 5 Φ1 + 3 μ2 (11 + Φ1) +
            μ1 (18 + 4 Φ1 + 3 μ2 (11 + Φ1))) +
        8 η (25 + 99 μ2 + 144 μ2^2 + 13 Φ1 + 19 μ2 Φ1 + 2 μ1^2 (27 + Φ1) +
            μ1 (79 + 21 Φ1 + μ2 (155 + Φ1)) + 2 ηt (-4 + 2 μ2 + 14 μ2^2 - Φ1 -
                μ2 Φ1 + 2 μ1^2 (5 + Φ1) + μ1 (6 + 38 μ2 - 5 Φ1 + 8 μ2 Φ1))) +
        4 η^2 (49 + 65 μ2 + 40 μ2^2 + 9 Φ1 + 49 μ2 Φ1 + 45 μ1^2 (7 + Φ1) +
            μ1 (364 + 561 μ2 + 114 Φ1 - 29 μ2 Φ1) +
            2 ηt (-55 μ2 + 70 μ2^2 - 10 × (4 + Φ1) + 2 μ1^2 (9 + Φ1) +
                μ1 (-22 - 8 Φ1 + 3 μ2 (27 + 5 Φ1))))) + (-1 + ηt) θl
    (160 η^4 θp (1 + μ1 + 4 μ2) + 2 × (19 + 8 μ2^2 + μ1^2 (17 - 5 Φ1) +
            15 Φ1 + μ2 (27 + 5 Φ1) + μ1 (36 + 35 μ2 + 16 Φ1 - 19 μ2 Φ1)) +
        θp (μ1^2 (4 + Φ1^2 - 7 Φ2 + Φ1 (7 + 3 Φ2)) - 2 × (1 - 5 Φ1^2 +
                5 Φ2 + 5 Φ1 Φ2 + 4 μ2^2 (-4 + 7 Φ2) +
                μ2 (-15 - 2 Φ1 - 5 Φ1^2 + 15 Φ2 + 5 Φ1 Φ2)) + μ1 (2 - 5 Φ1 + 17 Φ1^2 -
                17 Φ2 - 13 Φ1 Φ2 + 2 μ2 (23 + 5 Φ1^2 - 11 Φ2 + Φ1 (2 + Φ2)))) +
        2 η^3 (-12 μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 5 θp (8 - 8 Φ1 +
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                2 μ2 (7 + Φ1 + 8 Φ2) + μ1^2 (78 + Φ1^2 + 9 Φ2 + Φ1 (15 + Φ2)) +
                μ1 (86 + Φ1^2 + 9 Φ2 + Φ1 (31 + Φ2) + 2 μ2 (83 + 9 Φ1 + 14 Φ2)))) +
            2 η^2 (-12 × (4 μ2 + μ1 (7 + 28 μ2 - 5 Φ1) + μ1^2 (7 + Φ1)) +
              θp (66 + 10 Φ1 - 8 μ2^2 (-36 + 25 Φ2) + μ2 (206 + 54 Φ1 + 40 Φ2) +
                μ1^2 (472 + 17 Φ1^2 + 41 Φ2 + Φ1 (15 + 7 Φ2)) +
                μ1 (538 + 85 Φ1 + 47 Φ1^2 + 41 Φ2 - 23 Φ1 Φ2 -
                  2 μ2 (-599 + 61 Φ1 - 44 Φ2 + 30 Φ1 Φ2)))) +
            η (80 + 65 μ2 + 12 μ2^2 + 60 Φ1 + 15 μ2 Φ1 - 28 μ1^2 (-5 + 2 Φ1) +
              μ1 (220 + 321 μ2 + 160 Φ1 - 57 μ2 Φ1) +
              θp (4 μ2^2 (110 + 3 Φ1 - 85 Φ2) + μ2 (458 + 20 Φ1^2 + Φ1 (82 - 20 Φ2) -
                  60 Φ2) + 4 × (24 + 12 Φ1 + 5 Φ1^2 - 4 Φ2 - 5 Φ1 Φ2) +
                μ1^2 (278 + 19 Φ1^2 + 7 Φ2 + Φ1 (-19 + 11 Φ2)) +
                μ1 (374 + 87 Φ1^2 - 9 Φ2 - 19 Φ1 (1 + 3 Φ2) +
                  2 μ2 (457 + 10 Φ1^2 - 12 Φ2 - Φ1 (95 + 34 Φ2))))))) -
w (x (-1 + η) - η) (-1 + η) × (2 x^7 (-1 + η)^7 θp (-20 + 11 ηt + 20 θl -
      59 μ1 + 11 ηt μ1 + 35 θl μ1 - 39 μ1^2 + 15 θl μ1^2 - 60
       μ2 + 20 ηt μ2 + 60 θl μ2 - 60 μ1 μ2 + 28 θl μ1 μ2 + 3 ηt
       Φ1 - 15 μ1 Φ1 + 3 ηt μ1 Φ1 + 7 θl μ1 Φ1 - 9 μ1^2 Φ1 + θl
       μ1^2 Φ1 + η^2 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) + η
       (9 + 40 μ2 - 3 Φ1 + 12 μ1 (4 + 5 μ2 + Φ1) + μ1^2 (39 + 9 Φ1) -
         ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) + 4 θl μ2 Φ2 - ηt θl
       (20 + μ1^2 (15 + Φ1) + 7 μ1 (5 + 4 μ2 + Φ1) + 4 μ2 (15 + Φ2))) +
    x^4 (-1 + η)^4 (-((-1 + η) θp (70 η^4 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) -
              10 η^3 (-314 - 738 μ2 + 252 μ2^2 - 36 Φ1 - 21 μ1^2 (13 + 3 Φ1) +
                7 ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) +
                μ1 (-587 - 141 Φ1 + 6 μ2 (-55 + 9 Φ1))) +
              2 × (93 + 456 μ2^2 + 49 Φ1 + 4 μ1^2 (45 + Φ1) + μ2 (383 + 63 Φ1) +
                μ1 (273 + 71 Φ1 + μ2 (551 + 9 Φ1))) +
              ηt (180 μ2^2 - 24 × (5 + 3 Φ1) - μ2 (37 + 31 Φ1) + 4 μ1^2
                 (36 + 35 Φ1) + μ1 (24 - 172 Φ1 + μ2 (323 + 173 Φ1))) +
              10 η^2 (239 + 552 μ2 - 180 μ2^2 + 27 Φ1 + 62 μ2 Φ1 + μ1^2
                 (531 + 93 Φ1) + μ1 (770 + 844 μ2 + 210 Φ1 - 76 μ2 Φ1) +
                2 ηt (3 × (-23 - 34 μ2 + 28 μ2^2 - 6 Φ1) + μ1^2 (9 + Φ1) +
                  μ1 (-60 + 58 μ2 - 17 Φ1 + 18 μ2 Φ1))) +
              2 η (481 + 1561 μ2 + 1536 μ2^2 + 171 Φ1 + 357 μ2 Φ1 +
                30 μ1^2 (47 + 5 Φ1) + μ1 (1891 + 3145 μ2 + 531 Φ1 - 141 μ2 Φ1) +
                ηt (μ1^2 (290 + 42 Φ1) + 5 × (-59 - 46 μ2 + 140 μ2^2 - 15 Φ1 -
                    4 μ2 Φ1) + μ1 (-5 + 1254 μ2 - 153 Φ1 + 250 μ2 Φ1)))) +
      (-1 + ηt) θl (2 × (68 - 12 μ2^2 + μ1^2 (88 - 36 Φ1) + 60 Φ1 + μ2
            (49 + 15 Φ1) + μ1 (156 + 161 μ2 + 102 Φ1 - 69 μ2 Φ1)) +
          θp (50 + 25 Φ1 + 35 Φ1^2 + 4 μ2^2 (66 + 9 Φ1 - 65 Φ2) +
            μ2 (350 + 35 Φ1^2 + Φ1 (91 - 35 Φ2) - 53 Φ2) - 23 Φ2 -
            35 Φ1 Φ2 + 2 μ1 (115 + Φ1 + 39 Φ1^2 - 16 Φ2 - 31 Φ1 Φ2) +
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            μ1^2 (180 + 13 Φ1 + 7 Φ1^2 - 9 Φ2 + 9 Φ1 Φ2) +
            μ1 μ2 (718 + 35 Φ1^2 - 13 Φ2 - Φ1 (37 + 23 Φ2))) + 5 η^3 (-8 μ1
              (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + θp (352 + 2 μ2 (561 + 3 Φ1 + 28 Φ2) +
                μ1^2 (264 + 47 Φ1 + 3 Φ1^2 + 27 Φ2 + 3 Φ1 Φ2) + μ1 (616 + 131 Φ1 +
                  3 Φ1^2 + 27 Φ2 + 3 Φ1 Φ2 + μ2 (554 + 54 Φ1 + 84 Φ2)))) +
        η (4 × (81 + 15 μ2^2 + μ1^2 (24 - 69 Φ1) + 60 Φ1 + μ2 (53 + 15 Φ1) +
                μ1 (105 - 71 μ2 + 177 Φ1 - 57 μ2 Φ1)) +
            θp (518 + 117 Φ1 + 75 Φ1^2 + 4 μ2^2 (338 + 9 Φ1 - 321 Φ2) - 63 Φ2 -
                75 Φ1 Φ2 + μ2 (2122 + 343 Φ1 + 75 Φ1^2 - 77 Φ2 - 75 Φ1 Φ2) +
                μ1^2 (1784 + 65 Φ1^2 + 97 Φ2 + Φ1 (27 + 35 Φ2)) +
                μ1 (2302 + 204 Φ1 + 320 Φ1^2 + 34 Φ2 - 220 Φ1 Φ2 +
                  μ2 (5306 - 617 Φ1 + 75 Φ1^2 + 243 Φ2 - 255 Φ1 Φ2)))) +
        2 η^2 (-16 × (10 μ2 + 2 μ1 (15 + 58 μ2 - 6 Φ1) + 3 μ1^2 (10 + Φ1)) +
            5 θp (μ1^2 (347 + 10 Φ1^2 + 34 Φ2 + Φ1 (21 + 4 Φ2)) +
                2 × (6 × (15 + Φ1) + μ2^2 (76 - 60 Φ2) + μ2 (291 + 19 Φ1 + 18 Φ2)) +
                μ1 (527 + 87 Φ1 + 28 Φ1^2 + 34 Φ2 - 14 Φ1 Φ2 +
                  μ2 (886 - 62 Φ1 + 92 Φ2 - 36 Φ1 Φ2)))))) -
x^6 (-1 + η)^6 (4 × (-1 + ηt) θl (8 μ2 + μ1^2 (2 × (7 + Φ1) + η (9 + Φ1)) +
        μ1 (2 × (7 + 28 μ2 - 5 Φ1) + η (9 + 28 μ2 + Φ1))) + θp
      (14 η^3 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) - 2 η^2 (-121 - 386 μ2 + 84 μ2^2 +
            9 Φ1 - 21 μ1^2 (13 + 3 Φ1) + 2 μ1 (-197 - 195 μ2 - 48 Φ1 + 9 μ2 Φ1) +
            7 ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) +
        η (-4 × (73 - 62 μ2^2 + μ2 (191 - 10 Φ1) + 4 Φ1 + 16 μ1^2 (3 + Φ1) +
                μ1 (121 + μ2 (39 - 7 Φ1) + 26 Φ1)) + 2 ηt (31 + 72 μ2 + 56 μ2^2 +
                9 Φ1 + μ1 (31 + 9 Φ1 + 4 μ2 (5 + 3 Φ1))) + θl (304 + 2 μ2
                  (467 + Φ1 + 28 Φ2) + μ1^2 (228 + Φ1^2 + 9 Φ2 + Φ1 (25 + Φ2)) + μ1
                  (532 + Φ1^2 + 9 Φ2 + Φ1 (109 + Φ2) + 2 μ2 (223 + 9 Φ1 + 14 Φ2))) -
            ηt θl (304 + 2 μ2 (467 + Φ1 + 28 Φ2) + μ1^2 (228 + Φ1^2 +
                  9 Φ2 + Φ1 (25 + Φ2)) + μ1 (532 + Φ1^2 + 9 Φ2 +
                  Φ1 (109 + Φ2) + 2 μ2 (223 + 9 Φ1 + 14 Φ2)))) -
        2 × (52 + 229 μ1 + 177 μ1^2 + 144 μ2 + 312 μ1 μ2 + 40 μ2^2 +
            4 Φ1 + 65 μ1 Φ1 + 31 μ1^2 Φ1 + 20 μ2 Φ1 - 4 μ1 μ2 Φ1 -
            θl (μ1^2 (107 + 3 Φ1^2 + 7 Φ2 + Φ1 (2 + Φ2)) + 4 × (13 + Φ1 +
                  μ2 (40 + 3 Φ1 + 3 Φ2) - 2 μ2^2 (-7 + 5 Φ2)) + μ1 (159 + 24 Φ1 +
                  9 Φ1^2 + 7 Φ2 - 5 Φ1 Φ2 - 4 μ2 (-66 + 8 Φ1 - 4 Φ2 + 3 Φ1 Φ2))) +
            ηt (-46 - 68 μ2 + 56 μ2^2 - 12 Φ1 + 2 μ1 (-23 - 6 Φ1 +
                  2 μ2 (5 + 3 Φ1)) + θl μ1^2 (107 + 3 Φ1^2 + 7 Φ2 + Φ1 (2 + Φ2)) +
                4 θl (13 + Φ1 + μ2 (40 + 3 Φ1 + 3 Φ2) - 2 μ2^2 (-7 + 5 Φ2)) +
                θl μ1 (159 + 24 Φ1 + 9 Φ1^2 + 7 Φ2 - 5 Φ1 Φ2 -
                  4 μ2 (-66 + 8 Φ1 - 4 Φ2 + 3 Φ1 Φ2))))) +
x^5 (-1 + η)^5 (2 × (-1 + η) θp (89 + 371 μ1 + 282 μ1^2 + 299 μ2 +
        635 μ1 μ2 + 368 μ2^2 + 33 Φ1 + 105 μ1 Φ1 + 30 μ1^2 Φ1 + 71 μ2 Φ1 -
        19 μ1 μ2 Φ1 + 21 η^3 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) -
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        3 η^2 (μ1 (-529 + 36 μ2 (-10 + Φ1) - 129 Φ1) +
            8 × (-32 - 79 μ2 + 21 μ2^2 - 3 Φ1) - 21 μ1^2 (13 + 3 Φ1) +
            7 ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) +
        ηt (-59 + 140 μ2^2 - 15 Φ1 + 8 μ1^2 (6 + Φ1) - 2 μ2 (23 + 2 Φ1) +
            μ1 (-11 - 31 Φ1 + μ2 (214 + 50 Φ1))) +
        η (395 + 984 μ2 - 60 μ2^2 + 39 Φ1 + 122 μ2 Φ1 + 6 μ1^2 (177 + 31 Φ1) +
            μ1 (1457 + 1780 μ2 + 405 Φ1 - 88 μ2 Φ1) +
            2 ηt (6 × (-23 - 34 μ2 + 28 μ2^2 - 6 Φ1) + μ1^2 (9 + Φ1) +
                μ1 (-129 + 88 μ2 - 35 Φ1 + 36 μ2 Φ1)))) -
    (-1 + ηt) θl (84 + 65 μ2 - 160 η μ2 + 24 μ2^2 + 60 Φ1 + 15 μ2 Φ1 -
        μ1 (-92 - 17 μ2 + 4 η (95 + 372 μ2 - 49 Φ1) -
            176 Φ1 + 57 μ2 Φ1 + 20 η^2 (9 + 28 μ2 + Φ1)) -
        4 μ1^2 (-2 + 22 Φ1 + 5 η^2 (9 + Φ1) + η (95 + 11 Φ1)) +
        θp (94 + 378 μ2 + 272 μ2^2 + 21 Φ1 + 59 μ2 Φ1 + 15 Φ1^2 +
            15 μ2 Φ1^2 - 15 Φ2 - 25 μ2 Φ2 - 264 μ2^2 Φ2 - 15 Φ1 Φ2 -
            15 μ2 Φ1 Φ2 + μ1^2 (344 + 13 Φ1^2 + 13 Φ2 + Φ1 (-1 + 7 Φ2)) +
            6 η^2 (μ1^2 (123 + Φ1^2 + 9 Φ2 + Φ1 (18 + Φ2)) +
                2 × (82 + μ2 (257 + Φ1 + 14 Φ2)) + μ1
                 (287 + Φ1^2 + 9 Φ2 + Φ1 (60 + Φ2) + 2 μ2 (125 + 9 Φ1 + 14 Φ2))) +
            μ1 (438 + 64 Φ1^2 + Φ1 (32 - 44 Φ2) - 2 Φ2 + μ2
                 (1002 + 15 Φ1^2 + 23 Φ2 - Φ1 (149 + 51 Φ2))) +
            2 η (24 × (14 + Φ1) - 80 μ2^2 (-4 + 3 Φ2) + 2 μ2 (531 + 37 Φ1 +
                    36 Φ2) + μ1^2 (668 + 19 Φ1^2 + 55 Φ2 + Φ1 (27 + 7 Φ2)) +
                μ1 (1004 + 159 Φ1 + 55 Φ1^2 + 55 Φ2 - 29 Φ1 Φ2 -
                    2 μ2 (-839 + 79 Φ1 - 70 Φ2 + 36 Φ1 Φ2))))))) +
x^2 (-1 + η)^2 (-((-1 + η) θp (42 η^6 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) +
        ηt (-10 + 207 μ2 + 204 μ2^2 - 70 Φ1 - 76 μ1 Φ1 -
            15 μ2 Φ1 + 2 μ1^2 (5 + 21 Φ1) + 3 μ1 μ2 (69 + 35 Φ1)) -
        6 η^5 (μ1 (-703 + 90 μ2 (-3 + Φ1) - 165 Φ1) + 10 ×
             (-43 - 95 μ2 + 42 μ2^2 - 6 Φ1) - 21 μ1^2 (13 + 3 Φ1) +
            7 ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) +
        10 η^4 (322 + 672 μ2 - 480 μ2^2 + 42 Φ1 + 64 μ2 Φ1 +
            μ1^2 (531 + 93 Φ1) + μ1 (853 + 752 μ2 + 225 Φ1 - 140 μ2 Φ1) +
            2 ηt (3 × (-23 - 34 μ2 + 28 μ2^2 - 6 Φ1) + 2 μ1^2 (9 + Φ1) +
                μ1 (-51 + 86 μ2 - 16 Φ1 + 18 μ2 Φ1))) +
        6 η^2 (2 × (93 + 404 μ2 + 416 μ2^2 + 49 Φ1 + 62 μ2 Φ1 + 4 μ1^2
                 (45 + Φ1) + μ1 (273 + 572 μ2 + 71 Φ1 + 14 μ2 Φ1)) +
            ηt (-114 - 13 μ2 + 198 μ2^2 - 72 Φ1 - 31 μ2 Φ1 + 2 μ1^2
                 (56 + 51 Φ1) + μ1 (-2 + 499 μ2 - 174 Φ1 + 173 μ2 Φ1))) +
        4 η^3 (553 + 1693 μ2 + 928 μ2^2 + 183 Φ1 + 361 μ2 Φ1 +
            30 μ1^2 (47 + 5 Φ1) + μ1 (1963 + 3085 μ2 + 543 Φ1 - 233 μ2 Φ1) +
            ηt (μ1^2 (390 + 46 Φ1) + 5 × (-59 - 46 μ2 + 140 μ2^2 - 15 Φ1 -
                    4 μ2 Φ1) + μ1 (95 + 1622 μ2 - 149 Φ1 + 250 μ2 Φ1))) +
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                2 η (2 × (54 + 227 μ2 + 136 μ2^2 - 6 μ1^2 (-9 + Φ1) + 30 Φ1 +
                        17 μ2 Φ1 + μ1 (108 + 227 μ2 + 24 Φ1 + 23 μ2 Φ1)) +
                    ηt (-148 + 89 μ2 + 204 μ2^2 - 180 Φ1 - 57 μ2 Φ1 + 14 μ1^2
                        (-7 + 11 Φ1) + μ1 (-246 - 55 μ2 - 296 Φ1 + 267 μ2 Φ1)))) +
            (-1 + ηt) θl (-2 × (7 + 48 μ2 + 36 μ2^2 - 5 Φ1 + μ1^2 (7 + Φ1) +
                2 μ1 (7 - 2 Φ1 + 6 μ2 (4 + Φ1))) +
            θp (14 + 7 Φ1 + 5 Φ1^2 + 7 Φ2 - 5 Φ1 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
                μ2 (5 Φ1^2 - 5 Φ1 (-9 + Φ2) + 37 × (2 + Φ2)) +
                μ1^2 (-Φ1^2 + 7 × (2 + Φ2) + Φ1 (19 + Φ2)) + μ1 (28 + 26 Φ1 + 4 Φ1^2 +
                    14 Φ2 - 4 Φ1 Φ2 + μ2 (74 + 69 Φ1 + 5 Φ1^2 + 37 Φ2 + 7 Φ1 Φ2))) +
            η^5 (-20 μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + 3 θp (400 +
                    2 μ2 (655 + 5 Φ1 + 28 Φ2) + μ1^2 (300 + 5 Φ1^2 + 45 Φ2 +
                        Φ1 (69 + 5 Φ2)) + μ1 (700 + 153 Φ1 + 5 Φ1^2 +
                        45 Φ2 + 5 Φ1 Φ2 + 2 μ2 (331 + 45 Φ1 + 70 Φ2)))) +
            2 η^3 (2 × (75 - 3 μ2^2 + μ1^2 (56 - 31 Φ1) + 60 Φ1 + μ2 (29 + 15 Φ1) +
                    μ1 (131 + 179 Φ1 - 19 μ2 (13 + 3 Φ1))) +
                θp (614 + 141 Φ1 + 75 Φ1^2 + 4 μ2^2 (334 + 27 Φ1 - 303 Φ2) - 39 Φ2 -
                    75 Φ1 Φ2 + μ2 (2586 + 439 Φ1 + 75 Φ1^2 + 19 Φ2 - 75 Φ1 Φ2) +
                    μ1^2 (1912 + 65 Φ1^2 + 161 Φ2 + 7 Φ1 (13 + 5 Φ2)) +
                    μ1 (2526 + 292 Φ1 + 320 Φ1^2 + 122 Φ2 - 220 Φ1 Φ2 +
                        μ2 (5898 - 361 Φ1 + 75 Φ1^2 + 499 Φ2 - 255 Φ1 Φ2)))) +
            2 η^2 (188 + 636 μ1 + 448 μ1^2 + 83 μ2 + 443 μ1 μ2 - 84 μ2^2 +
                180 Φ1 + 310 μ1 Φ1 + 4 μ1^2 Φ1 + 45 μ2 Φ1 - 207 μ1 μ2 Φ1 +
                3 θp (74 + 37 Φ1 + 35 Φ1^2 + 8 μ2^2 (38 + 9 Φ1 - 28 Φ2) - 11 Φ2 -
                    35 Φ1 Φ2 + μ2 (464 + 137 Φ1 + 35 Φ1^2 - 5 Φ2 - 35 Φ1 Φ2) +
                    2 μ1^2 (101 + 3 Φ1^2 + Φ2 + Φ1 (11 + 4 Φ2)) +
                    μ1 (276 + 23 Φ1 + 77 Φ1^2 - 9 Φ2 - 63 Φ1 Φ2 +
                        μ2 (840 + 25 Φ1 + 35 Φ1^2 + 39 Φ2 - 23 Φ1 Φ2)))) +
            η (2 × (40 + 90 μ1^2 - 114 μ2^2 + 70 Φ1 + 3 μ2 (-29 + 5 Φ1) +
                    μ1 (130 + 76 Φ1 - μ2 (59 + 105 Φ1))) +
                θp (126 + 69 Φ1 + 75 Φ1^2 + 4 μ2^2 (134 + 63 Φ1 - 27 Φ2) +
                    9 Φ2 - 75 Φ1 Φ2 + μ2 (844 + 349 Φ1 + 75 Φ1^2 + 123 Φ2 - 75 Φ1 Φ2) +
                    2 μ1^2 (58 + 55 Φ1 - 2 Φ1^2 + 2 Φ2 + 7 Φ1 Φ2) +
                    μ1 (242 + 107 Φ1 + 107 Φ1^2 + 13 Φ2 - 97 Φ1 Φ2 +
                        μ2 (868 + 397 Φ1 + 75 Φ1^2 + 135 Φ2 + 33 Φ1 Φ2)))) +
            2 η^4 (-4 × (20 μ2 + μ1 (85 + 324 μ2 - 23 Φ1) + μ1^2 (85 + 7 Φ1)) +
                5 θp (4 × (10 μ2 Φ1 + 3 × (17 + Φ1) + μ2^2 (34 - 30 Φ2) + 9 μ2
                        (19 + Φ2)) + μ1^2 (373 + 11 Φ1^2 + 47 Φ2 + Φ1 (36 + 5 Φ2)) +
                    μ1 (577 + 29 Φ1^2 + Φ1 (102 - 13 Φ2) + 47 Φ2 -
                        4 μ2 (-245 - 34 Φ2 + Φ1 (7 + 9 Φ2))))))) +
        η θp (-2 η^8 (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) + 2 ηt (7 + 48 μ2 +
            36 μ2^2 - 5 Φ1 + μ1^2 (7 + Φ1) + 2 μ1 (7 - 2 Φ1 + 6 μ2 (4 + Φ1))) + 2
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η^7 (-67 - 146 μ2 + 84 μ2^2 - 9 Φ1 - 3 μ1^2 (13 + 3 Φ1) +
    2 μ1 (-53 - 15 μ2 - 12 Φ1 + 9 μ2 Φ1) +
    ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) + η^6
  (-2 × (57 - 176 μ2^2 + 7 Φ1 + 2 μ1^2 (69 + 11 Φ1) + μ2 (98 + 22 Φ1) +
        μ1 (195 + μ2 (190 - 50 Φ1) + 53 Φ1)) -
    θl (64 + 2 μ2 (107 + Φ1 + 4 Φ2) + μ1^2 (48 + Φ1^2 + 9 Φ2 + Φ1 (13 + Φ2)) +
        μ1 (112 + Φ1^2 + 9 Φ2 + Φ1 (25 + Φ2) + 2 μ2 (55 + 9 Φ1 + 14 Φ2))) +
    ηt (-2 × (-35 - 48 μ2 + 56 μ2^2 - 9 Φ1 + 2 μ1^2 (9 + Φ1) +
            μ1 (-17 - 7 Φ1 + 4 μ2 (19 + 3 Φ1))) + θl (64 +
            2 μ2 (107 + Φ1 + 4 Φ2) + μ1^2 (48 + Φ1^2 + 9 Φ2 + Φ1 (13 + Φ2)) + μ1
             (112 + Φ1^2 + 9 Φ2 + Φ1 (25 + Φ2) + 2 μ2 (55 + 9 Φ1 + 14 Φ2))))) +
η^3 (2 × (57 + 296 μ2^2 + 29 Φ1 + 8 μ1^2 (18 + Φ1) + 3 μ2 (89 + 17 Φ1) +
        μ1 (201 - 3 μ2 (-145 + Φ1) + 55 Φ1)) -
    θl (98 + 49 Φ1 + 35 Φ1^2 + 4 μ2^2 (86 + 27 Φ1 - 47 Φ2) + Φ2 -
        35 Φ1 Φ2 + μ2 (578 + 183 Φ1 + 35 Φ1^2 + 43 Φ2 - 35 Φ1 Φ2) +
        μ1^2 (224 + 5 Φ1^2 + 13 Φ2 + Φ1 (31 + 7 Φ2)) +
        μ1 (322 + 44 Φ1 + 76 Φ1^2 + 14 Φ2 - 64 Φ1 Φ2 +
            μ2 (962 + 87 Φ1 + 35 Φ1^2 + 91 Φ2 - 23 Φ1 Φ2))) +
    ηt (-20 + 248 μ1 + 268 μ1^2 - 91 μ2 + 685 μ1 μ2 + 48 μ2^2 +
        48 Φ1 + 24 μ1 Φ1 + 36 μ1^2 Φ1 + 7 μ2 Φ1 - 5 μ1 μ2 Φ1 +
        θl (98 + 49 Φ1 + 35 Φ1^2 + 4 μ2^2 (86 + 27 Φ1 - 47 Φ2) + Φ2 - 35 Φ1 Φ2 +
            μ2 (578 + 183 Φ1 + 35 Φ1^2 + 43 Φ2 - 35 Φ1 Φ2) + μ1^2 (224 + 5 Φ1^2 +
                13 Φ2 + Φ1 (31 + 7 Φ2)) + μ1 (322 + 44 Φ1 + 76 Φ1^2 + 14 Φ2 -
                64 Φ1 Φ2 + μ2 (962 + 87 Φ1 + 35 Φ1^2 + 91 Φ2 - 23 Φ1 Φ2))))) +
2 η^5 (10 - 95 μ1 - 105 μ1^2 - 101 μ2 - 385 μ1 μ2 - 324 μ2^2 - 20 Φ1 -
    31 μ1 Φ1 + μ1^2 Φ1 - 51 μ2 Φ1 - 3 μ1 μ2 Φ1 -
    θl (4 × (19 + Φ1) - 40 μ2^2 (-1 + Φ2) + 2 μ2 (131 + 7 Φ1 + 6 Φ2) +
        μ1^2 (133 + 4 Φ1^2 + 20 Φ2 + Φ1 (17 + 2 Φ2)) + μ1 (209 + 39 Φ1 +
            10 Φ1^2 + 20 Φ2 - 4 Φ1 Φ2 + 2 μ2 (179 + Φ1 + 30 Φ2 - 6 Φ1 Φ2))) +
    ηt (13 - 22 μ2 - 84 μ2^2 + 3 Φ1 + 4 μ2 Φ1 - 8 μ1^2 (10 + Φ1) -
        μ1 (67 - 19 Φ1 + μ2 (322 + 38 Φ1)) + θl (4 × (19 + Φ1) -
            40 μ2^2 (-1 + Φ2) + 2 μ2 (131 + 7 Φ1 + 6 Φ2) + μ1^2 (133 +
                4 Φ1^2 + 20 Φ2 + Φ1 (17 + 2 Φ2)) + μ1 (209 + 39 Φ1 + 10 Φ1^2 +
                20 Φ2 - 4 Φ1 Φ2 + 2 μ2 (179 + Φ1 + 30 Φ2 - 6 Φ1 Φ2)))))) + η
  (θl (-14 - 7 Φ1 - 5 Φ1^2 - 7 Φ2 + 5 Φ1 Φ2 - 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) -
        μ2 (5 Φ1^2 - 5 Φ1 (-9 + Φ2) + 37 × (2 + Φ2)) +
        μ1^2 (Φ1^2 - 7 × (2 + Φ2) - Φ1 (19 + Φ2)) - μ1 (28 + 26 Φ1 + 4 Φ1^2 +
            14 Φ2 - 4 Φ1 Φ2 + μ2 (74 + 69 Φ1 + 5 Φ1^2 + 37 Φ2 + 7 Φ1 Φ2))) +
    ηt (-28 - 96 μ1 - 68 μ1^2 + 95 μ2 + 71 μ1 μ2 + 120 μ2^2 - 60 Φ1 -
        68 μ1 Φ1 + 4 μ1^2 Φ1 - 15 μ2 Φ1 + 81 μ1 μ2 Φ1 +
        θl (14 + 7 Φ1 + 5 Φ1^2 + 7 Φ2 - 5 Φ1 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
            μ2 (5 Φ1^2 - 5 Φ1 (-9 + Φ2) + 37 × (2 + Φ2)) + μ1^2 (-Φ1^2 +
                7 × (2 + Φ2) + Φ1 (19 + Φ2)) + μ1 (28 + 26 Φ1 + 4 Φ1^2 + 14 Φ2 -
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$$4\,\Phi1\,\Phi2 + \mu2\,\left(74 + 69\,\Phi1 + 5\,\Phi1^2 + 37\,\Phi2 + 7\,\Phi1\,\Phi2\right)\Big)\Big)\Big)\Big) +$$
$$\eta^2\,\Big(4\times\Big(18 + 79\,\mu2 + 40\,\mu2^2 - 2\,\mu1^2\,(-9 + \Phi1) + 10\,\Phi1 + 5\,\mu2\,\Phi1 +$$
$$\mu1\,(36 + 8\,\Phi1 + \mu2\,(79 + 11\,\Phi1))\Big) +$$
$$\theta l\,\Big(-58 - 31\,\Phi1 - 25\,\Phi1^2 - 12\,\mu2^2\,(18 + 9\,\Phi1 - \Phi2) - 11\,\Phi2 +$$
$$25\,\Phi1\,\Phi2 - \mu2\,\left(352 + 147\,\Phi1 + 25\,\Phi1^2 + 73\,\Phi2 - 25\,\Phi1\,\Phi2\right) +$$
$$2\,\mu1^2\,\left(\Phi1^2 - 3\times(8 + \Phi2) - 2\,\Phi1\,(10 + \Phi2)\right) -$$
$$\mu1\,\Big(106 + 47\,\Phi1 + 35\,\Phi1^2 + 17\,\Phi2 - 33\,\Phi1\,\Phi2 +$$
$$\mu2\,\left(344 + 163\,\Phi1 + 25\,\Phi1^2 + 69\,\Phi2 + 11\,\Phi1\,\Phi2\right)\Big)\Big) +$$
$$\eta t\,\Big(-74 - 208\,\mu1 - 134\,\mu1^2 - 89\,\mu2 - 177\,\mu1\,\mu2 - 24\,\mu2^2 -$$
$$50\,\Phi1 - 124\,\mu1\,\Phi1 + 22\,\mu1^2\,\Phi1 - 23\,\mu2\,\Phi1 + 73\,\mu1\,\mu2\,\Phi1 +$$
$$\theta l\,\Big(58 + 31\,\Phi1 + 25\,\Phi1^2 + 12\,\mu2^2\,(18 + 9\,\Phi1 - \Phi2) + 11\,\Phi2 -$$
$$25\,\Phi1\,\Phi2 + \mu2\,\left(352 + 147\,\Phi1 + 25\,\Phi1^2 + 73\,\Phi2 - 25\,\Phi1\,\Phi2\right) +$$
$$\mu1^2\,\left(-2\,\Phi1^2 + 6\times(8 + \Phi2) + 4\,\Phi1\,(10 + \Phi2)\right) +$$
$$\mu1\,\Big(106 + 47\,\Phi1 + 35\,\Phi1^2 + 17\,\Phi2 - 33\,\Phi1\,\Phi2 +$$
$$\mu2\,\left(344 + 163\,\Phi1 + 25\,\Phi1^2 + 69\,\Phi2 + 11\,\Phi1\,\Phi2\right)\Big)\Big)\Big)\Big) + \eta^4$$
$$\Big(4\times\Big(16 - 156\,\mu2^2 + 6\,\mu2\,(-5 + \Phi1) - 5\,\Phi1 + \mu1^2\,(51 + 13\,\Phi1) +$$
$$\mu1\,(67 + \mu2\,(6 - 42\,\Phi1) + 20\,\Phi1)\Big) -$$
$$\theta l\,\Big(142 + 33\,\Phi1 + 15\,\Phi1^2 + 12\,\mu2^2\,(22 + 3\,\Phi1 - 19\,\Phi2) - 3\,\Phi2 -$$
$$15\,\Phi1\,\Phi2 + \mu2\,\left(610 + 107\,\Phi1 + 15\,\Phi1^2 + 23\,\Phi2 - 15\,\Phi1\,\Phi2\right) +$$
$$\mu1^2\,\left(408 + 13\,\Phi1^2 + 45\,\Phi2 + \Phi1\,(31 + 7\,\Phi2)\right) +$$
$$\mu1\,\Big(550 + 76\,\Phi1 + 64\,\Phi1^2 + 42\,\Phi2 - 44\,\Phi1\,\Phi2 +$$
$$\mu2\,\left(1298 + 15\,\Phi1^2 + 151\,\Phi2 - 3\,\Phi1\,(7 + 17\,\Phi2)\right)\Big)\Big) +$$
$$\eta t\,\Big(-10 + 106\,\mu1 + 116\,\mu1^2 - 103\,\mu2 + 121\,\mu1\,\mu2 + 64\,\mu2^2 +$$
$$42\,\Phi1 + 118\,\mu1\,\Phi1 - 44\,\mu1^2\,\Phi1 + 23\,\mu2\,\Phi1 - 73\,\mu1\,\mu2\,\Phi1 +$$
$$\theta l\,\Big(142 + 33\,\Phi1 + 15\,\Phi1^2 + 12\,\mu2^2\,(22 + 3\,\Phi1 - 19\,\Phi2) - 3\,\Phi2 -$$
$$15\,\Phi1\,\Phi2 + \mu2\,\left(610 + 107\,\Phi1 + 15\,\Phi1^2 + 23\,\Phi2 - 15\,\Phi1\,\Phi2\right) +$$
$$\mu1^2\,\left(408 + 13\,\Phi1^2 + 45\,\Phi2 + \Phi1\,(31 + 7\,\Phi2)\right) +$$
$$\mu1\,\Big(550 + 76\,\Phi1 + 64\,\Phi1^2 + 42\,\Phi2 - 44\,\Phi1\,\Phi2 +$$
$$\mu2\,\left(1298 + 15\,\Phi1^2 + 151\,\Phi2 - 3\,\Phi1\,(7 + 17\,\Phi2)\right)\Big)\Big)\Big)\Big)\Big)\Big) -$$
$$x^3\,(-1 + \eta)^3\,\Big(-2\times(-1 + \eta)\,\theta p\,\Big(35\,\eta^5\,(11 + 20\,\mu2 + 3\,\Phi1 + \mu1\,(11 + 3\,\Phi1)) +$$
$$4\times\Big(9 + 24\,\mu2^2 - \mu1^2\,(-9 + \Phi1) + 5\,\Phi1 +$$
$$\mu2\,(37 + 3\,\Phi1) + \mu1\,(18 + 4\,\Phi1 + \mu2\,(37 + 3\,\Phi1))\Big) -$$
$$5\,\eta^4\,\Big(4\times\left(-93 - 211\,\mu2 + 84\,\mu2^2 - 12\,\Phi1\right) - 21\,\mu1^2\,(13 + 3\,\Phi1) +$$
$$7\,\eta t\,(11 + 20\,\mu2 + 3\,\Phi1 + \mu1\,(11 + 3\,\Phi1)) +$$
$$3\,\mu1\,(-215 - 51\,\Phi1 + 4\,\mu2\,(-25 + 6\,\Phi1))\Big) +$$
$$\eta t\,\Big(-52 + 60\,\mu2^2 - 19\,\mu2\,(-1 + \Phi1) - 60\,\Phi1 + \mu1^2\,(-2 + 70\,\Phi1) +$$
$$\mu1\,(-54 - 98\,\Phi1 + \mu2\,(-25 + 89\,\Phi1))\Big) +$$
$$2\,\eta\,\Big(186 + 787\,\mu2 + 872\,\mu2^2 + 98\,\Phi1 + 125\,\mu2\,\Phi1 + 8\,\mu1^2$$
$$(45 + \Phi1) + \mu1\,(546 + 1123\,\mu2 + 142\,\Phi1 + 23\,\mu2\,\Phi1) +$$
$$\eta t\,\Big(-117 - 25\,\mu2 + 189\,\mu2^2 - 72\,\Phi1 - 31\,\mu2\,\Phi1 +$$
$$\mu1^2\,(128 + 121\,\Phi1) + \mu1\,(11 + 411\,\mu2 - 173\,\Phi1 + 173\,\mu2\,\Phi1)\Big)\Big) +$$
$$2\,\eta^2\,\Big(517 + 1627\,\mu2 + 1232\,\mu2^2 + 177\,\Phi1 + 359\,\mu2\,\Phi1 + 30\,\mu1^2$$
$$(47 + 5\,\Phi1) + \mu1\,(1927 + 3115\,\mu2 + 537\,\Phi1 - 187\,\mu2\,\Phi1) + \eta t$$

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                (4 μ1^2 (85 + 11 Φ1) + 5 × (-59 - 46 μ2 + 140 μ2^2 - 15 Φ1 - 4 μ2 Φ1) +
                  μ1 (45 + 1438 μ2 - 151 Φ1 + 250 μ2 Φ1))) + 10 η^3
            (187 + 408 μ2 - 220 μ2^2 + 23 Φ1 + 42 μ2 Φ1 + μ1^2 (354 + 62 Φ1) +
              μ1 (541 + 532 μ2 + 145 Φ1 - 72 μ2 Φ1) + 2 ηt (-46 - 68 μ2 + 56 μ2^2 -
                12 Φ1 + μ1^2 (9 + Φ1) + μ1 (-37 - 11 Φ1 + 12 μ2 (4 + Φ1))))) +
        (-1 + ηt) θl (38 + 96 μ1 + 58 μ1^2 - 95 μ2 - 79 μ1 μ2 - 120 μ2^2 +
          70 Φ1 + 76 μ1 Φ1 - 18 μ1^2 Φ1 + 15 μ2 Φ1 - 105 μ1 μ2 Φ1 +
          θp (34 + 19 Φ1 + 25 Φ1^2 + 8 μ2^2 (20 + 9 Φ1 - 6 Φ2) - Φ2 -
            25 Φ1 Φ2 + μ2 (246 + 101 Φ1 + 25 Φ1^2 + 25 Φ2 - 25 Φ1 Φ2) -
            μ1^2 (-34 + Φ1^2 + Φ2 - 5 Φ1 (7 + Φ2)) + μ1 (68 + 30 Φ1 + 36 Φ1^2 - 2 Φ2 -
              32 Φ1 Φ2 + μ2 (262 + 117 Φ1 + 25 Φ1^2 + 33 Φ2 + 11 Φ1 Φ2))) +
          10 η^4 (-4 μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) + θp
              (μ1^2 (141 + 29 Φ1 + 2 Φ1^2 + 18 Φ2 + 2 Φ1 Φ2) +
                4 × (47 + μ2 (152 + Φ1 + 7 Φ2)) + μ1 (329 + 71 Φ1 + 2 Φ1^2 +
                  18 Φ2 + 2 Φ1 Φ2 + 4 μ2 (76 + 9 Φ1 + 14 Φ2)))) +
          2 η (196 + 115 μ2 - 60 μ2^2 + μ1^2 (356 - 52 Φ1) + 180 Φ1 +
            45 μ2 Φ1 + μ1 (552 + 463 μ2 + 308 Φ1 - 207 μ2 Φ1) +
            θp (μ1^2 (382 + 13 Φ1^2 - 7 Φ2 + Φ1 (35 + 17 Φ2)) +
              2 × (62 + 31 Φ1 + 35 Φ1^2 + μ2^2 (284 + 54 Φ1 - 242 Φ2) - 17 Φ2 -
                35 Φ1 Φ2 + μ2 (407 + 114 Φ1 + 35 Φ1^2 - 29 Φ2 - 35 Φ1 Φ2)) +
              μ1 (506 + 25 Φ1 + 155 Φ1^2 - 41 Φ2 - 125 Φ1 Φ2 +
                2 μ2 (779 - 6 Φ1 + 35 Φ1^2 + 13 Φ2 - 23 Φ1 Φ2)))) + 4 η^3
            (-2 × (40 μ2 + μ1 (145 + 556 μ2 - 47 Φ1) + μ1^2 (145 + 13 Φ1)) + 5
              θp (8 × (16 + Φ1) + μ2^2 (96 - 80 Φ2) + μ2 (422 + 26 Φ1 + 24 Φ2) + μ1^2
                (240 + 19 Φ1 + 7 Φ1^2 + 27 Φ2 + 3 Φ1 Φ2) + μ1 (368 + 19 Φ1^2 - 9 Φ1
                  (-7 + Φ2) + 27 Φ2 + μ2 (622 + 76 Φ2 - 6 Φ1 (5 + 4 Φ2))))) +
          2 η^2 (3 × (78 + 6 μ2^2 + μ1^2 (40 - 50 Φ1) + 60 Φ1 + μ2 (41 + 15 Φ1) -
                3 μ1 μ2 (53 + 19 Φ1) + 2 μ1 (59 + 89 Φ1)) +
            θp (566 + 129 Φ1 + 75 Φ1^2 + 24 μ2^2 (56 + 3 Φ1 - 52 Φ2) - 51 Φ2 -
              75 Φ1 Φ2 + μ2 (2354 + 391 Φ1 + 75 Φ1^2 - 29 Φ2 - 75 Φ1 Φ2) +
              μ1^2 (1848 + 59 Φ1 + 65 Φ1^2 + 129 Φ2 + 35 Φ1 Φ2) +
              μ1 (2414 + 248 Φ1 + 320 Φ1^2 + 78 Φ2 - 220 Φ1 Φ2 +
                μ2 (5602 + 75 Φ1^2 + 371 Φ2 - 3 Φ1 (163 + 85 Φ2))))))) +
    x (-1 + η) × (14 η^8 θp (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1)) - 2 η^7 θp
        (-411 - 916 μ2 + 504 μ2^2 - 51 Φ1 - 21 μ1^2 (13 + 3 Φ1) +
          12 μ1 (-57 - 20 μ2 - 13 Φ1 + 9 μ2 Φ1) +
          7 ηt (11 + 20 μ2 + 3 Φ1 + μ1 (11 + 3 Φ1))) - 2
        ηt θp (11 + 64 μ2 + 48 μ2^2 - 5 Φ1 + μ1^2 (11 + Φ1) +
          2 μ1 (11 - 2 Φ1 + μ2 (32 + 6 Φ1))) - η^4
        (2 θp (217 + 101 μ2 - 960 μ2^2 - 7 Φ1 + 117 μ2 Φ1 + 2 μ1^2
              (345 + 67 Φ1) + μ1 (907 + μ2 (725 - 345 Φ1) + 265 Φ1) +
            ηt (-73 + 286 μ2^2 + μ1^2 (248 - 118 Φ1) + 69 Φ1 +
              6 μ2 (-38 + 7 Φ1) + μ1 (175 + 632 μ2 + 203 Φ1 - 96 μ2 Φ1))) +
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(-1 + ηt) θl (72 + 144 μ1 + 72 μ1^2 + 17 μ2 - 335 μ1 μ2 -
    12 μ2^2 + 60 Φ1 + 180 μ1 Φ1 - 12 μ1^2 Φ1 + 15 μ2 Φ1 - 57 μ1 μ2 Φ1 +
    θp (662 + 153 Φ1 + 75 Φ1^2 + 8 μ2^2 (166 + 18 Φ1 - 147 Φ2) - 27 Φ2 -
        75 Φ1 Φ2 + μ2 (2818 + 487 Φ1 + 75 Φ1^2 + 67 Φ2 - 75 Φ1 Φ2) +
        μ1^2 (1976 + 65 Φ1^2 + 193 Φ2 + Φ1 (123 + 35 Φ2)) +
        μ1 (2638 + 336 Φ1 + 320 Φ1^2 + 166 Φ2 - 220 Φ1 Φ2 +
            μ2 (6194 - 233 Φ1 + 75 Φ1^2 + 627 Φ2 - 255 Φ1 Φ2)))) - 2
η^3 (θp (2 × (132 + 597 μ2 + 664 μ2^2 + 68 Φ1 + 107 μ2 Φ1 + 2 μ1^2
            (153 + 7 Φ1) + μ1 (438 + 933 μ2 + 118 Φ1 + 5 μ2 Φ1)) +
    ηt (-82 - 123 μ2 + 186 μ2^2 + 36 Φ1 - 5 μ2 Φ1 + μ1^2
            (382 + 68 Φ1) + μ1 (300 + 1209 μ2 - 52 Φ1 + 79 μ2 Φ1))) +
(-1 + ηt) θl (60 + 17 μ2 - 36 μ2^2 + 60 Φ1 + 15 μ2 Φ1 +
    20 μ1^2 (9 + Φ1) + μ1 (240 + 141 μ2 + 104 Φ1 - 69 μ2 Φ1) +
    θp (μ1^2 (426 + 11 Φ1^2 + 15 Φ2 + Φ1 (53 + 15 Φ2)) +
        2 × (86 + 43 Φ1 + 35 Φ1^2 + μ2^2 (324 + 90 Φ1 - 206 Φ2) - 5 Φ2 -
            35 Φ1 Φ2 + μ2 (521 + 160 Φ1 + 35 Φ1^2 + 19 Φ2 - 35 Φ1 Φ2)) +
        μ1 (598 + 67 Φ1 + 153 Φ1^2 + 5 Φ2 - 127 Φ1 Φ2 +
            2 μ2 (901 + 56 Φ1 + 35 Φ1^2 + 65 Φ2 - 23 Φ1 Φ2)))) + 2
η (ηt θp (23 - 150 μ2^2 + μ1^2 (33 - 23 Φ1) + 15 μ2 (-9 + Φ1) +
    65 Φ1 + 8 μ1 (7 + 9 Φ1) - 3 μ1 μ2 (41 + 31 Φ1)) +
(-1 + ηt) θl (3 + 6 μ1 + 3 μ1^2 + 32 μ2 + 32 μ1 μ2 + 24 μ2^2 -
    5 Φ1 - 4 μ1 Φ1 + μ1^2 Φ1 + 12 μ1 μ2 Φ1 +
    θp (-14 - 7 Φ1 - 5 Φ1^2 - 7 Φ2 + 5 Φ1 Φ2 - 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) -
        μ2 (5 Φ1^2 - 5 Φ1 (-9 + Φ2) + 37 × (2 + Φ2)) + μ1^2 (Φ1^2 -
            7 × (2 + Φ2) - Φ1 (19 + Φ2)) - μ1 (28 + 26 Φ1 + 4 Φ1^2 + 14 Φ2 -
            4 Φ1 Φ2 + μ2 (74 + 69 Φ1 + 5 Φ1^2 + 37 Φ2 + 7 Φ1 Φ2)))) +
η^2 (-4 θp (ηt (-64 + 15 μ2^2 - 55 Φ1 - 37 μ1 (4 + 3 Φ1) - 3 μ2
            (13 + 7 Φ1) + 3 μ1 μ2 (-37 + 27 Φ1) + μ1^2 (-84 + 37 Φ1)) +
    2 × (27 + 116 μ2 + 64 μ2^2 - 3 μ1^2 (-9 + Φ1) + 15 Φ1 +
        8 μ2 Φ1 + 2 μ1 (27 + 6 Φ1 + μ2 (58 + 7 Φ1)))) +
(-1 + ηt) θl (-42 - 164 μ1 - 122 μ1^2 + 79 μ2 + 39 μ1 μ2 +
    108 μ2^2 - 70 Φ1 - 76 μ1 Φ1 - 18 μ1^2 Φ1 - 15 μ2 Φ1 + 105 μ1 μ2 Φ1 +
    θp (-8 μ2^2 (74 + 36 Φ1 - 9 Φ2) - μ2 (950 + 395 Φ1 + 75 Φ1^2 + 171 Φ2 -
            75 Φ1 Φ2) - 3 × (50 + 27 Φ1 + 25 Φ1^2 + 7 Φ2 - 25 Φ1 Φ2) +
        μ1^2 (-130 + 5 Φ1^2 - 11 Φ2 - Φ1 (115 + 13 Φ2)) -
        μ1 (2 × (140 + 62 Φ1 + 53 Φ1^2 + 16 Φ2 - 49 Φ1 Φ2) +
            μ2 (950 + 443 Φ1 + 75 Φ1^2 + 171 Φ2 + 33 Φ1 Φ2)))) - 2
η^6 (-2 × (-1 + ηt) θl μ1 (9 + 28 μ2 + Φ1 + μ1 (9 + Φ1)) +
θp (-239 - 1028 μ1 - 789 μ1^2 - 408 μ2 - 1172 μ1 μ2 +
    756 μ2^2 - 27 Φ1 - 288 μ1 Φ1 - 123 μ1^2 Φ1 - 130 μ2 Φ1 +
    236 μ1 μ2 Φ1 - θl (212 + μ2 (702 + 6 Φ1 + 28 Φ2) +
        μ1^2 (159 + 40 Φ1 + 3 Φ1^2 + 27 Φ2 + 3 Φ1 Φ2) + μ1 (371 + 82 Φ1 +
            3 Φ1^2 + 27 Φ2 + 3 Φ1 Φ2 + μ2 (358 + 54 Φ1 + 84 Φ2)) +
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                    ηt (199 + 268 μ2 - 336 μ2^2 + 51 Φ1 - 10 μ1^2 (9 + Φ1) +
                        μ1 (109 + 41 Φ1 - 8 μ2 (50 + 9 Φ1)) +
                        θl (212 + μ2 (702 + 6 Φ1 + 28 Φ2) + μ1^2 (159 + 40 Φ1 + 3 Φ1^2 +
                              27 Φ2 + 3 Φ1 Φ2) + μ1 (371 + 82 Φ1 + 3 Φ1^2 + 27 Φ2 +
                              3 Φ1 Φ2 + μ2 (358 + 54 Φ1 + 84 Φ2))))))) - 2 η^5
            (-2 × (-1 + ηt) θl (8 μ2 + μ1 (39 + 148 μ2 - 9 Φ1) + 3 μ1^2 (13 + Φ1)) +
              θp (138 - 210 μ1 - 348 μ1^2 - 295 μ2 - 1643 μ1 μ2 - 1884 μ2^2 -
                  90 Φ1 - 84 μ1 Φ1 + 36 μ1^2 Φ1 - 233 μ2 Φ1 - 65 μ1 μ2 Φ1 -
                  θl (24 × (18 + Φ1) + μ2^2 (256 - 240 Φ2) + 2 μ2 (735 + 41 Φ1 + 36 Φ2) +
                      μ1^2 (772 + 23 Φ1^2 + 107 Φ2 + Φ1 (87 + 11 Φ2)) +
                      μ1 (1204 + 219 Φ1 + 59 Φ1^2 + 107 Φ2 - 25 Φ1 Φ2 +
                        μ2 (2054 - 22 Φ1 + 316 Φ2 - 72 Φ1 Φ2))) +
                  ηt (19 - 178 μ2 - 364 μ2^2 + 3 Φ1 + 20 μ2 Φ1 - 2 μ1^2
                       (175 + 19 Φ1) - μ1 (331 - 85 Φ1 + 2 μ2 (703 + 89 Φ1)) +
                      θl (24 × (18 + Φ1) + μ2^2 (256 - 240 Φ2) + 2 μ2 (735 + 41 Φ1 +
                              36 Φ2) + μ1^2 (772 + 23 Φ1^2 + 107 Φ2 + Φ1 (87 + 11 Φ2)) +
                        μ1 (1204 + 219 Φ1 + 59 Φ1^2 + 107 Φ2 - 25 Φ1 Φ2 +
                              μ2 (2054 - 22 Φ1 + 316 Φ2 - 72 Φ1 Φ2)))))))) +
w^2 (-1 + η)^2 (2 x^8 (-1 + η)^9 θp (η - ηt + 4 μ1) (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
    x^7 (-1 + η)^7
      (4 × (-1 + ηt) θl (4 μ2 + μ1 (11 + 44 μ2 - 5 Φ1) + μ1^2 (11 + Φ1)) + θp
          (-138 + 138 θl - 438 μ1 + 268 θl μ1 - 300 μ1^2 +
            130 θl μ1^2 - 414 μ2 + 438 θl μ2 - 478 μ1 μ2 +
            326 θl μ1 μ2 + 48 θl μ2^2 - 10 Φ1 + 10 θl Φ1 - 114 μ1 Φ1 +
            41 θl μ1 Φ1 - 68 μ1^2 Φ1 + 7 θl μ1^2 Φ1 - 22 μ2 Φ1 +
            14 θl μ2 Φ1 + 14 μ1 μ2 Φ1 - 26 θl μ1 μ2 Φ1 + 9 θl μ1 Φ1^2 +
            3 θl μ1^2 Φ1^2 + 16 η^3 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
            2 η^2 (-15 - 26 μ2 + 28 μ2^2 - 3 Φ1 - 32 μ1^2 (3 + Φ1) + μ1 (-111 -
                  118 μ2 - 35 Φ1 + 6 μ2 Φ1) + 8 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
            2 η (30 + 149 μ2 + 28 μ2^2 - 6 Φ1 + 11 μ2 Φ1 + 2 μ1^2 (27 + Φ1) +
                μ1 (-μ2 (-121 + Φ1) + 14 × (6 + Φ1)) + ηt (-26 μ2 + 28 μ2^2 -
                  3 × (5 + Φ1) - 3 μ1 (5 + Φ1) + 2 μ1 μ2 (5 + 3 Φ1))) +
            11 θl μ1 Φ2 + 11 θl μ1^2 Φ2 + 16 θl μ2 Φ2 + 32 θl μ1 μ2 Φ2 -
            40 θl μ2^2 Φ2 - 5 θl μ1 Φ1 Φ2 + θl μ1^2 Φ1 Φ2 - 12 θl μ1 μ2 Φ1 Φ2 -
            ηt (-78 - 116 μ2 + 56 μ2^2 - 22 Φ1 + 2 μ1 (-39 - 11 Φ1 + 2 μ2 (5 + 3 Φ1)) +
                θl μ1^2 (130 + 3 Φ1^2 + 11 Φ2 + Φ1 (7 + Φ2)) +
                2 θl (69 + 5 Φ1 - 4 μ2^2 (-6 + 5 Φ2) + μ2 (219 + 7 Φ1 + 8 Φ2)) +
                θl μ1 (268 + 9 Φ1^2 + Φ1 (41 - 5 Φ2) + 11 Φ2 +
                  μ2 (326 + 32 Φ2 - 2 Φ1 (13 + 6 Φ2))))))) -
    x^5 (-1 + η)^5 ((-1 + η) θp (112 η^4 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) +
            2 × (219 + 704 μ2^2 + 83 Φ1 + μ1^2 (450 + 38 Φ1) +
                μ2 (833 + 145 Φ1) + μ1 (669 + μ2 (1169 - 41 Φ1) + 175 Φ1)) -
            14 η^3 (3 × (-39 - 58 μ2 + 28 μ2^2 - 11 Φ1) - 32 μ1^2 (3 + Φ1) +
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            μ1 (-213 - 98 μ2 - 65 Φ1 + 18 μ2 Φ1) +
            8 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
        ηt (516 μ2^2 - 6 × (39 + 17 Φ1) - μ2 (113 + 35 Φ1) + 4 μ1^2
            (68 + 37 Φ1) + μ1 (38 - 218 Φ1 + μ2 (927 + 265 Φ1))) +
        6 η^2 (693 + 1689 μ2 - 608 μ2^2 + 85 Φ1 + 77 μ2 Φ1 + 14 μ1^2 (75 + 17 Φ1) +
            μ1 (1743 + 1473 μ2 + 449 Φ1 - 169 μ2 Φ1) + 7 ηt (-39 - 58 μ2 +
                28 μ2^2 - 11 Φ1 + μ1 (-39 + 10 μ2 - 11 Φ1 + 6 μ2 Φ1))) +
        2 η (1275 + 3770 μ2 + 700 μ2^2 + 255 Φ1 + 512 μ2 Φ1 + 48 μ1^2
            (51 + 8 Φ1) + μ1 (3723 + 4622 μ2 + 963 Φ1 - 346 μ2 Φ1) +
            2 ηt (-279 + 588 μ2^2 - 75 Φ1 - 6 μ2 (46 + Φ1) +
                μ1^2 (113 + 13 Φ1) + 2 μ1 (-83 - 49 Φ1 + 6 μ2 (51 + 13 Φ1))))) -
    (-1 + ηt) θl (-2 × (84 μ2^2 + μ2 (7 - 15 Φ1) - 90 × (1 + Φ1) +
            μ1^2 (-80 + 84 Φ1) + μ1 μ2 (-9 + 93 Φ1) - 2 μ1 (85 + 96 Φ1)) +
        θp (258 + 67 Φ1 + 45 Φ1^2 + 4 μ2^2 (118 + 27 Φ1 - 91 Φ2) - 9 Φ2 -
            45 Φ1 Φ2 + μ2 (1146 + 237 Φ1 + 45 Φ1^2 + 37 Φ2 - 45 Φ1 Φ2) +
            μ1^2 (512 + 11 Φ1^2 + 31 Φ2 + Φ1 (37 + 9 Φ2)) +
            μ1 (770 + 92 Φ1 + 116 Φ1^2 + 22 Φ2 - 96 Φ1 Φ2 +
                μ2 (1834 + 45 Φ1^2 + 165 Φ2 - 3 Φ1 (9 + 19 Φ2)))) +
        η^2 (-40 × (6 μ2 + μ1 (25 + 96 μ2 - 7 Φ1) + μ1^2 (25 + 2 Φ1)) +
            3 θp (μ1^2 (962 + 23 Φ1^2 + 103 Φ2 + Φ1 (79 + 9 Φ2)) +
                μ1 (1976 + 65 Φ1^2 + Φ1 (317 - 33 Φ2) + 103 Φ2 +
                    26 μ2 (95 + 12 Φ2) - 6 μ2 Φ1 (19 + 14 Φ2)) + 2 × (507 +
                    35 Φ1 - 4 μ2^2 (-38 + 35 Φ2) + μ2 (1635 + 51 Φ1 + 56 Φ2)))) +
        η (408 + 197 μ2 + 84 μ2^2 + 300 Φ1 + 75 μ2 Φ1 - 4 μ1^2 (126 +
                97 Φ1) - μ1 (96 - 980 Φ1 + 3 μ2 (889 + 95 Φ1)) +
            θp (μ1^2 (67 Φ1^2 + 31 Φ1 (3 + Φ2) + 7 × (374 + 25 Φ2)) +
                μ1 (4526 + 519 Φ1 + 373 Φ1^2 + 97 Φ2 - 275 Φ1 Φ2 +
                    μ2 (7810 - 668 Φ1 + 90 Φ1^2 + 614 Φ2 - 306 Φ1 Φ2)) + 2 ×
                (954 + 105 Φ1 + 45 Φ1^2 + 2 μ2^2 (314 + 9 Φ1 - 387 Φ2) - 39 Φ2 - 45
                    Φ1 Φ2 + μ2 (3381 + 226 Φ1 + 45 Φ1^2 - 3 Φ2 - 45 Φ1 Φ2))))) +
η θp (2 η^9 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - ηt μ2 (11 + 8 μ2 + 5 Φ1 +
        μ1 (11 + 5 Φ1)) - η ηt (24 + 224 μ2^2 - 40 Φ1 + 8 μ1^2 Φ1 +
        μ2 (267 + 5 Φ1) + μ1 (24 - 44 Φ1 + μ2 (267 + 77 Φ1))) - 2 η^8
    (ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 × (18 + 27 μ2 - 14 μ2^2 + 5 Φ1 +
            2 μ1^2 (3 + Φ1) + μ1 (24 + 3 μ2 + 7 Φ1 - 3 μ2 Φ1))) + 2 η^7
    (135 + 269 μ2 - 276 μ2^2 + 19 Φ1 + 11 μ2 Φ1 + 6 μ1^2 (23 + 5 Φ1) +
        μ1 (273 + 133 μ2 + 67 Φ1 - 61 μ2 Φ1) +
        2 ηt (-18 - 27 μ2 + 14 μ2^2 - 5 Φ1 + μ1 (-18 + 5 μ2 - 5 Φ1 + 3 μ2 Φ1))) -
    η^4 (12 × (24 - 4 μ2^2 + 5 Φ1 + 6 μ1^2 (7 + Φ1) + μ2 (67 + 13 Φ1) +
            μ1 (66 + μ2 (79 - 17 Φ1) + 17 Φ1)) -
        θl (330 + 91 Φ1 + 45 Φ1^2 + 4 μ2^2 (134 + 45 Φ1 - 73 Φ2) + 15 Φ2 -
            45 Φ1 Φ2 + μ2 (1476 + 331 Φ1 + 45 Φ1^2 + 133 Φ2 - 45 Φ1 Φ2) +
            2 μ1^2 (291 + 5 Φ1^2 + 33 Φ2 + Φ1 (35 + 4 Φ2)) +
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        μ1 (912 + 149 Φ1 + 115 Φ1^2 + 81 Φ2 - 97 Φ1 Φ2 +
            μ2 (2172 + 131 Φ1 + 45 Φ1^2 + 313 Φ2 - 57 Φ1 Φ2))) +
    ηt (3 × (-14 + 24 μ2^2 + 5 μ2 (-17 + Φ1) - 12 μ1^2 (-11 + Φ1) +
            30 Φ1 + μ1 (118 + μ2 (235 - 19 Φ1) + 54 Φ1)) +
        θl (330 + 91 Φ1 + 45 Φ1^2 + 4 μ2^2 (134 + 45 Φ1 - 73 Φ2) + 15 Φ2 -
            45 Φ1 Φ2 + μ2 (1476 + 331 Φ1 + 45 Φ1^2 + 133 Φ2 - 45 Φ1 Φ2) +
            2 μ1^2 (291 + 5 Φ1^2 + 33 Φ2 + Φ1 (35 + 4 Φ2)) +
            μ1 (912 + 149 Φ1 + 115 Φ1^2 + 81 Φ2 - 97 Φ1 Φ2 +
                μ2 (2172 + 131 Φ1 + 45 Φ1^2 + 313 Φ2 - 57 Φ1 Φ2)))))) + η^5
(2 × (-45 + 732 μ2^2 + μ1^2 (42 - 26 Φ1) + 29 Φ1 + μ2 (200 + 58 Φ1) +
        μ1 (-3 + 508 μ2 + 3 Φ1 + 64 μ2 Φ1)) +
    3 θl (126 + 15 Φ1 + 5 Φ1^2 + 4 μ2^2 (18 + 3 Φ1 - 19 Φ2) - Φ2 -
        5 Φ1 Φ2 + μ2 (464 + 39 Φ1 + 5 Φ1^2 + 13 Φ2 - 5 Φ1 Φ2) +
        2 μ1^2 (83 + 2 Φ1^2 + 10 Φ2 + Φ1 (8 + Φ2)) + μ1 (292 + 43 Φ1 + 21 Φ1^2 +
            19 Φ2 - 15 Φ1 Φ2 + μ2 (520 - Φ1 + 5 Φ1^2 + 73 Φ2 - 17 Φ1 Φ2))) -
    ηt (36 - 108 μ1 - 144 μ1^2 - 119 μ2 - 911 μ1 μ2 - 160 μ2^2 +
        52 Φ1 + 156 μ1 Φ1 - 64 μ1^2 Φ1 + 31 μ2 Φ1 - 161 μ1 μ2 Φ1 +
        3 θl (126 + 15 Φ1 + 5 Φ1^2 + 4 μ2^2 (18 + 3 Φ1 - 19 Φ2) - Φ2 - 5 Φ1 Φ2 +
            μ2 (464 + 39 Φ1 + 5 Φ1^2 + 13 Φ2 - 5 Φ1 Φ2) + 2 μ1^2 (83 + 2 Φ1^2 +
                10 Φ2 + Φ1 (8 + Φ2)) + μ1 (292 + 43 Φ1 + 21 Φ1^2 + 19 Φ2 -
                15 Φ1 Φ2 + μ2 (520 - Φ1 + 5 Φ1^2 + 73 Φ2 - 17 Φ1 Φ2)))))) - 2
η^6 (-2 × (63 + 199 μ2 - 38 μ2^2 - 37 μ1 μ2 (-7 + Φ1) + 15 Φ1 +
        38 μ2 Φ1 + 48 μ1 (4 + Φ1) + 3 μ1^2 (43 + 5 Φ1)) -
    θl (81 + 5 Φ1 - 4 μ2^2 (-4 + 5 Φ2) + μ2 (270 + 8 Φ1 + 8 Φ2) +
        μ1^2 (78 + 2 Φ1^2 + 12 Φ2 + Φ1 (11 + Φ2)) + μ1 (159 + 28 Φ1 +
            5 Φ1^2 + 12 Φ2 - 2 Φ1 Φ2 + μ2 (210 + 4 Φ1 + 38 Φ2 - 6 Φ1 Φ2))) +
    ηt (2 × (27 - 84 μ2^2 + 7 Φ1 - 3 μ1^2 (11 + Φ1) + μ2 (17 + Φ1) -
            μ1 (6 - 10 Φ1 + μ2 (147 + 23 Φ1))) +
        θl (81 + 5 Φ1 - 4 μ2^2 (-4 + 5 Φ2) + μ2 (270 + 8 Φ1 + 8 Φ2) +
            μ1^2 (78 + 2 Φ1^2 + 12 Φ2 + Φ1 (11 + Φ2)) + μ1 (159 + 28 Φ1 + 5 Φ1^2 +
                12 Φ2 - 2 Φ1 Φ2 + μ2 (210 + 4 Φ1 + 38 Φ2 - 6 Φ1 Φ2))))) - η^3
(2 × (93 + 344 μ2^2 + 49 Φ1 + 4 μ1^2 (45 + Φ1) + μ2 (441 + 61 Φ1) +
        μ1 (273 + 71 Φ1 + μ2 (609 + 19 Φ1))) -
    3 θl (58 + 29 Φ1 + 15 Φ1^2 + 4 μ2^2 (46 + 21 Φ1 - 5 Φ2) + 13 Φ2 -
        15 Φ1 Φ2 + μ2 (312 + 125 Φ1 + 15 Φ1^2 + 71 Φ2 - 15 Φ1 Φ2) +
        2 μ1^2 (49 + 8 Φ2 + Φ1 (14 + Φ2)) + μ1 (156 + 45 Φ1 + 27 Φ1^2 + 29 Φ2 -
            25 Φ1 Φ2 + μ2 (448 + 101 Φ1 + 15 Φ1^2 + 91 Φ2 - 3 Φ1 Φ2))) +
    ηt (4 × (-33 - 2 μ2^2 - 8 Φ1 - μ2 (64 + 9 Φ1) + μ1^2 (20 + 22 Φ1) +
            μ1 (-13 - 37 Φ1 + 2 μ2 (55 + 12 Φ1))) +
        3 θl (58 + 29 Φ1 + 15 Φ1^2 + 4 μ2^2 (46 + 21 Φ1 - 5 Φ2) + 13 Φ2 -
            15 Φ1 Φ2 + μ2 (312 + 125 Φ1 + 15 Φ1^2 + 71 Φ2 - 15 Φ1 Φ2) + 2 μ1^2
             (49 + 8 Φ2 + Φ1 (14 + Φ2)) + μ1 (156 + 45 Φ1 + 27 Φ1^2 + 29 Φ2 -
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                    25 Φ1 Φ2 + μ2 (448 + 101 Φ1 + 15 Φ1^2 + 91 Φ2 - 3 Φ1 Φ2)))))) +
        η^2 (-4 × (9 + 16 μ2^2 - μ1^2 (-9 + Φ1) + 5 Φ1 + μ2 (41 + 3 Φ1) +
              μ1 (18 + 4 Φ1 + μ2 (41 + 3 Φ1))) +
           θl (60 + 31 Φ1 + 15 Φ1^2 + 21 Φ2 - 15 Φ1 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
              μ2 (312 + 145 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) +
              μ1^2 (-2 Φ1^2 + 18 × (3 + Φ2) + 2 Φ1 (20 + Φ2)) +
              μ1 (114 + 59 Φ1 + 19 Φ1^2 + 39 Φ2 - 19 Φ1 Φ2 +
                 μ2 (312 + 161 Φ1 + 15 Φ1^2 + 103 Φ2 + 9 Φ1 Φ2))) +
           ηt (-4 × (64 μ2^2 - 6 μ2 (-7 + Φ1) + μ1^2 (-50 + 4 Φ1) -
                 6 × (3 + 5 Φ1) + μ1 (-68 - 47 Φ1 + 12 μ2 (2 + 3 Φ1))) +
              θl (-60 - 31 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2
                    (50 + 27 Φ1 + 11 Φ2) - μ2 (312 + 145 Φ1 + 15 Φ1^2 + 103 Φ2 -
                       15 Φ1 Φ2) + 2 μ1^2 (Φ1^2 - 9 × (3 + Φ2) - Φ1 (20 + Φ2)) -
                 μ1 (114 + 59 Φ1 + 19 Φ1^2 + 39 Φ2 - 19 Φ1 Φ2 +
                    μ2 (312 + 161 Φ1 + 15 Φ1^2 + 103 Φ2 + 9 Φ1 Φ2)))))) -
x (-1 + η) × (16 η^9 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 2 η^8 θp
      (-249 - 374 μ2 + 196 μ2^2 - 69 Φ1 - 32 μ1^2 (3 + Φ1) +
        μ1 (-345 - 58 μ2 - 101 Φ1 + 42 μ2 Φ1) +
        8 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) - ηt θp
      (4 + 4 μ1^2 + 20 μ2^2 + μ2 (27 + 5 Φ1) + μ1 (8 + μ2 (27 + 5 Φ1))) + 2
      η^7 θp (840 + 1763 μ2 - 1628 μ2^2 + 108 Φ1 + 77 μ2 Φ1 +
        μ1^2 (954 + 206 Φ1) + μ1 (1794 + 1015 μ2 + 440 Φ1 - 367 μ2 Φ1) +
        ηt (-249 - 374 μ2 + 196 μ2^2 - 69 Φ1 +
           μ1 (-249 + 70 μ2 - 69 Φ1 + 42 μ2 Φ1))) - η
      ((-1 + ηt) θl (4 + 4 μ1^2 + 5 μ2 + 4 μ2^2 - 5 μ2 Φ1 + μ1 (8 + 5 μ2 - 5 μ2 Φ1)) +
        ηt θp (76 + 657 μ2 + 540 μ2^2 - 80 Φ1 + 15 μ2 Φ1 + 4 μ1^2 (12 + 7 Φ1) +
           μ1 (124 + 665 μ2 - 88 Φ1 + 159 μ2 Φ1))) + η^6
      (8 × (-1 + ηt) θl (2 μ2 + 2 μ1 (7 + 26 μ2 - Φ1) + μ1^2 (14 + Φ1)) +
        θp (1164 + 3960 μ1 + 2796 μ1^2 + 4130 μ2 + 6010 μ1 μ2 + 280 μ2^2 +
           308 Φ1 + 996 μ1 Φ1 + 292 μ1^2 Φ1 + 886 μ2 Φ1 - 674 μ1 μ2 Φ1 +
           θl (μ1^2 (1066 + 27 Φ1^2 + 155 Φ2 + Φ1 (139 + 13 Φ2)) + 2 ×
                 (555 + 35 Φ1 - 20 μ2^2 (-6 + 7 Φ2) + μ2 (1839 + 55 Φ1 + 56 Φ2)) +
              μ1 (2176 + 69 Φ1^2 - 29 Φ1 (-13 + Φ2) + 155 Φ2 +
                 μ2 (2846 + Φ1 (22 - 84 Φ2) + 488 Φ2))) -
           ηt (570 + 292 μ2 - 1960 μ2^2 + 146 Φ1 + 24 μ2 Φ1 - 4 μ1^2
                 (181 + 17 Φ1) - 2 μ1 (77 - 111 Φ1 + 2 μ2 (817 + 135 Φ1)) +
              θl μ1^2 (1066 + 27 Φ1^2 + 155 Φ2 + Φ1 (139 + 13 Φ2)) + 2 θl
                 (555 + 35 Φ1 - 20 μ2^2 (-6 + 7 Φ2) + μ2 (1839 + 55 Φ1 + 56 Φ2)) +
              θl μ1 (2176 + 69 Φ1^2 - 29 Φ1 (-13 + Φ2) + 155 Φ2 +
                 μ2 (2846 + Φ1 (22 - 84 Φ2) + 488 Φ2)))) - η^4
      (θp (2 × (795 + 2467 μ2 + 560 μ2^2 + 203 Φ1 + 455 μ2 Φ1 + 2 μ1^2
                 (729 + 91 Φ1) + μ1 (2253 + 3091 μ2 + 583 Φ1 - 439 μ2 Φ1)) +
           ηt (-402 - 1133 μ2 + 804 μ2^2 + 258 Φ1 + 25 μ2 Φ1 - 4 μ1^2
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            (-392 + 45 Φ1) + μ1 (1166 + 3995 μ2 + 426 Φ1 + 37 μ2 Φ1)))) +
    (-1 + ηt) θl (2 × (-84 μ2^2 + 90 × (1 + Φ1) + 8 μ1^2 (28 + Φ1) +
          μ2 (-7 + 15 Φ1) + μ1 (314 + 194 Φ1 - μ2 (115 + 93 Φ1))) +
        θp (1578 + 431 Φ1 + 225 Φ1^2 + 4 μ2^2 (654 + 207 Φ1 - 383 Φ2) + 51 Φ2 -
          225 Φ1 Φ2 + μ2 (7050 + 1561 Φ1 + 225 Φ1^2 + 569 Φ2 - 225 Φ1 Φ2) +
          μ1^2 (2840 + 317 Φ1 + 51 Φ1^2 + 295 Φ2 + 41 Φ1 Φ2) +
          μ1 (4418 + 688 Φ1 + 576 Φ1^2 + 346 Φ2 - 484 Φ1 Φ2 +
            μ2 (10 522 + 497 Φ1 + 225 Φ1^2 + 1417 Φ2 - 285 Φ1 Φ2)))))) +
η^5 (θp (-912 + 598 μ2 + 7592 μ2^2 + 200 Φ1 + 410 μ2 Φ1 - 4 μ1^2
          (99 + 97 Φ1) + 2 μ1 (-654 + 1751 μ2 - 148 Φ1 + 397 μ2 Φ1) +
        ηt (-6 + 731 μ2 + 372 μ2^2 - 210 Φ1 - 151 μ2 Φ1 +
          4 μ1^2 (163 + 96 Φ1) + μ1 (646 + 3595 μ2 - 714 Φ1 + 701 μ2 Φ1))) -
    (-1 + ηt) θl (72 + μ2 - 12 μ2^2 + 60 Φ1 + 15 μ2 Φ1 - 4 μ1^2
          (26 + 5 Φ1) - μ1 (32 - 196 Φ1 + 19 μ2 (53 + 3 Φ1)) +
        θp (μ1^2 (2914 + 71 Φ1^2 + 323 Φ2 + Φ1 (249 + 35 Φ2)) +
          μ1 (5110 + 723 Φ1 + 377 Φ1^2 + 293 Φ2 - 271 Φ1 Φ2 +
            2 μ2 (4525 - 74 Φ1 + 45 Φ1^2 + 587 Φ2 - 153 Φ1 Φ2)) +
          2 (μ2^2 (644 + 90 Φ1 - 702 Φ2) + μ2 (4017 + 326 Φ1 +
                45 Φ1^2 + 93 Φ2 - 45 Φ1 Φ2) +
            3 × (366 + 43 Φ1 + 15 Φ1^2 - 5 Φ2 - 15 Φ1 Φ2)))))) -
η^3 (2 θp (2 × (195 + 728 μ2^2 + 103 Φ1 + μ1^2 (369 + 7 Φ1) + 14 μ2
            (65 + 9 Φ1) + 2 μ1 (282 + 73 Φ1 + μ2 (623 + 18 Φ1))) +
        ηt (168 μ2^2 - 4 × (77 + 36 Φ1) + 4 μ1^2 (21 + 55 Φ1) -
          μ2 (369 + 79 Φ1) + μ1 (-224 - 410 Φ1 + μ2 (847 + 305 Φ1)))) +
    (-1 + ηt) θl (2 × (56 - 93 μ2 - 148 μ2^2 + 80 Φ1 + 5 μ2 Φ1 +
          4 μ1^2 (53 + 8 Φ1) + μ1 (268 - 5 μ2 + 118 Φ1 - 103 μ2 Φ1) +
        θp (μ1^2 (1154 + Φ1^2 + 181 Φ2 + Φ1 (327 + 25 Φ2)) +
          μ1 (1826 + 519 Φ1 + 325 Φ1^2 + 325 Φ2 - 299 Φ1 Φ2 +
            2 μ2 (2627 + 575 Φ1 + 90 Φ1^2 + 520 Φ2 - 18 Φ1 Φ2)) +
          2 × (2 μ2^2 (542 + 243 Φ1 - 69 Φ2) + μ2 (1815 +
                727 Φ1 + 90 Φ1^2 + 402 Φ2 - 90 Φ1 Φ2) +
            6 × (56 + 28 Φ1 + 15 Φ1^2 + 12 Φ2 - 15 Φ1 Φ2)))))) +
η^2 (-2 θp (6 × (9 + 41 μ2 + 16 μ2^2 - μ1^2 (-9 + Φ1) + 5 Φ1 + 3 μ2
            Φ1 + μ1 (18 + 41 μ2 + 4 Φ1 + 3 μ2 Φ1)) +
        ηt (-92 + 407 μ2 + 512 μ2^2 - 200 Φ1 - 31 μ2 Φ1 + μ1^2
            (-206 + 82 Φ1) + μ1 (-298 + 311 μ2 - 304 Φ1 + 257 μ2 Φ1))) +
    (-1 + ηt) θl (-2 × (4 - 68 μ2^2 + 20 Φ1 + 2 μ1^2 (13 + Φ1) -
          5 μ2 (15 + Φ1) + μ1 (30 + 22 Φ1 - μ2 (71 + 41 Φ1))) +
        3 θp (-60 - 31 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2
            (50 + 27 Φ1 + 11 Φ2) - μ2 (312 + 145 Φ1 + 15 Φ1^2 + 103 Φ2 -
              15 Φ1 Φ2) + 2 μ1^2 (Φ1^2 - 9 × (3 + Φ2) - Φ1 (20 + Φ2)) -
          μ1 (114 + 59 Φ1 + 19 Φ1^2 + 39 Φ2 - 19 Φ1 Φ2 +
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                    μ2 (312 + 161 Φ1 + 15 Φ1^2 + 103 Φ2 + 9 Φ1 Φ2)))))) +
x^6 (-1 + η)^6 (2 × (-1 + η) θp (195 + 603 μ1 + 408 μ1^2 + 609 μ2 +
      793 μ1 μ2 + 216 μ2^2 + 39 Φ1 + 157 μ1 Φ1 + 64 μ1^2 Φ1 +
      85 μ2 Φ1 - 41 μ1 μ2 Φ1 + 28 η^3 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
      7 η^2 (-39 - 58 μ2 + 28 μ2^2 + 3 μ1 (-29 + 2 μ2 (-9 + Φ1) - 9 Φ1) -
         11 Φ1 - 16 μ1^2 (3 + Φ1) + 4 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) +
      ηt (-93 + 196 μ2^2 - 25 Φ1 + 4 μ1^2 (8 + Φ1) - 2 μ2 (46 + Φ1) +
         μ1 (-61 - 33 Φ1 + 4 μ2 (46 + 13 Φ1))) +
      η (588 + 1569 μ2 - 304 μ2^2 + 60 Φ1 + 77 μ2 Φ1 + 14 μ1^2 (75 + 17 Φ1) +
         μ1 (1638 + 1573 μ2 + 424 Φ1 - 109 μ2 Φ1) + 7 ηt (-39 - 58 μ2 +
            28 μ2^2 - 11 Φ1 + μ1 (-39 + 10 μ2 - 11 Φ1 + 6 μ2 Φ1)))) -
   (-1 + ηt) θl (84 - 16 μ1 - 332 η μ1 - 100 μ1^2 - 332 η μ1^2 + 49 μ2 -
      96 η μ2 - 415 μ1 μ2 - 1296 η μ1 μ2 + 24 μ2^2 + 60 Φ1 + 196 μ1 Φ1 +
      116 η μ1 Φ1 - 92 μ1^2 Φ1 - 28 η μ1^2 Φ1 + 15 μ2 Φ1 - 57 μ1 μ2 Φ1 +
      θp (306 + 1074 μ2 + 208 μ2^2 + 33 Φ1 + 67 μ2 Φ1 + 15 Φ1^2 +
         15 μ2 Φ1^2 - 15 Φ2 - 9 μ2 Φ2 - 264 μ2^2 Φ2 - 15 Φ1 Φ2 -
         15 μ2 Φ1 Φ2 + μ1^2 (424 + 11 Φ1^2 + 23 Φ2 + Φ1 (9 + 5 Φ2)) +
         μ1 (730 + 62 Φ1^2 + Φ1 (78 - 46 Φ2) + 8 Φ2 +
            μ2 (1250 + 15 Φ1^2 + 79 Φ2 - Φ1 (133 + 51 Φ2))) + 2 η
          (5 × (99 + 7 Φ1) - 20 μ2^2 (-8 + 7 Φ2) + 2 μ2 (792 + 25 Φ1 + 28 Φ2) +
            μ1^2 (11 Φ1^2 + 4 Φ1 (8 + Φ2) + 9 × (52 + 5 Φ2)) +
            μ1 (963 + 151 Φ1 + 32 Φ1^2 + 45 Φ2 - 17 Φ1 Φ2 -
               2 μ2 (-594 + 37 Φ1 - 67 Φ2 + 21 Φ1 Φ2)))))) +
x^3 (-1 + η)^3 (-2 × (-1 + η) θp (18 - 4 ηt + 36 μ1 + 16 ηt μ1 + 18 μ1^2 +
      20 ηt μ1^2 + 82 μ2 + 303 ηt μ2 + 82 μ1 μ2 + 283 ηt μ1 μ2 +
      32 μ2^2 + 304 ηt μ2^2 + 10 Φ1 - 80 ηt Φ1 + 8 μ1 Φ1 - 116 ηt μ1 Φ1 -
      2 μ1^2 Φ1 + 72 ηt μ1^2 Φ1 + 6 μ2 Φ1 - 7 ηt μ2 Φ1 + 6 μ1 μ2 Φ1 +
      113 ηt μ1 μ2 Φ1 + 56 η^6 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
      7 η^5 (5 × (-39 - 58 μ2 + 28 μ2^2 - 11 Φ1) - 32 μ1^2 (3 + Φ1) +
         3 μ1 (-97 - 26 μ2 - 29 Φ1 + 10 μ2 Φ1) +
         8 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + 5 η^4
       (903 + 1929 μ2 - 1216 μ2^2 + 135 Φ1 + 77 μ2 Φ1 + 14 μ1^2 (75 + 17 Φ1) +
         μ1 (1953 + 1273 μ2 + 499 Φ1 - 289 μ2 Φ1) + 7 ηt (-39 - 58 μ2 +
            28 μ2^2 - 11 Φ1 + μ1 (-39 + 10 μ2 - 11 Φ1 + 6 μ2 Φ1))) +
      2 η (222 + 1007 μ2 + 824 μ2^2 + 118 Φ1 + 137 μ2 Φ1 + 4 μ1^2
          (99 + Φ1) + μ1 (618 + 1343 μ2 + 158 Φ1 + 35 μ2 Φ1) + ηt
          (μ1^2 (96 + 250 Φ1) + 2 × (-90 + 95 μ2 + 240 μ2^2 - 96 Φ1 - 25 μ2 Φ1) +
            μ1 (-84 + 628 μ2 - 377 Φ1 + 322 μ2 Φ1))) +
      10 η^3 (495 + 1334 μ2 - 164 μ2^2 + 99 Φ1 + 172 μ2 Φ1 + 16 μ1^2
          (51 + 8 Φ1) + μ1 (1311 + 335 Φ1 - 2 μ2 (-725 + 91 Φ1)) +
         2 ηt (-93 + 196 μ2^2 - 25 Φ1 - 2 μ2 (46 + Φ1) +
            μ1^2 (49 + 5 Φ1) + 4 μ1 (-11 - 8 Φ1 + μ2 (61 + 13 Φ1)))) +
      η^2 (2 × (1167 + 2816 μ2^2 + 427 Φ1 + 10 μ1^2 (225 + 19 Φ1) +
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                μ2 (4349 + 725 Φ1) + μ1 (3417 + μ2 (5837 - 277 Φ1) + 887 Φ1)) +
            ηt (2652 μ2^2 - 7 μ2 (67 + 25 Φ1) - 6 × (191 + 85 Φ1) + 4 μ1^2
                (342 + 149 Φ1) + μ1 (222 - 1090 Φ1 + μ2 (5819 + 1325 Φ1)))))) +
        (-1 + ηt) θl (-2 × (12 + 116 μ2^2 - 20 Φ1 + 4 μ1^2 Φ1 + μ2 (139 + 5 Φ1) +
            μ1 (12 - 22 Φ1 + μ2 (139 + 41 Φ1))) +
          θp (60 + 31 Φ1 + 15 Φ1^2 + 21 Φ2 - 15 Φ1 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
            μ2 (312 + 145 Φ1 + 15 Φ1^2 + 103 Φ2 - 15 Φ1 Φ2) +
            μ1^2 (-2 Φ1^2 + 18 × (3 + Φ2) + 2 Φ1 (20 + Φ2)) +
            μ1 (114 + 59 Φ1 + 19 Φ1^2 + 39 Φ2 - 19 Φ1 Φ2 +
                μ2 (312 + 161 Φ1 + 15 Φ1^2 + 103 Φ2 + 9 Φ1 Φ2))) +
          2 η^2 (-6 × (84 μ2^2 + μ2 (7 - 15 Φ1) + 38 μ1^2 (-4 + Φ1) -
                90 × (1 + Φ1) + μ1 (-242 - 193 Φ1 + μ2 (53 + 93 Φ1))) +
            θp (1434 + 383 Φ1 + 225 Φ1^2 + 4 μ2^2 (622 + 171 Φ1 - 419 Φ2) + 3 Φ2 -
                225 Φ1 Φ2 + μ2 (6390 + 1373 Φ1 + 225 Φ1^2 + 377 Φ2 - 225 Φ1 Φ2) +
                μ1^2 (53 Φ1^2 + 225 × (12 + Φ2) + Φ1 (251 + 43 Φ2)) +
                μ1 (4134 + 574 Φ1 + 578 Φ1^2 + 228 Φ2 - 482 Φ1 Φ2 +
                    μ2 (9846 + 181 Φ1 + 225 Φ1^2 + 1121 Φ2 - 285 Φ1 Φ2)))) +
          5 η^4 (-4 × (12 μ2 + μ1 (67 + 252 μ2 - 13 Φ1) + μ1^2 (67 + 5 Φ1)) +
            θp (μ1^2 (1014 + 109 Φ1 + 25 Φ1^2 + 129 Φ2 + 11 Φ1 Φ2) + 2 × (531 +
                    35 Φ1 - 4 μ2^2 (-34 + 35 Φ2) + μ2 (1737 + 53 Φ1 + 56 Φ2)) +
                μ1 (2076 + 347 Φ1 + 67 Φ1^2 + 129 Φ2 - 31 Φ1 Φ2 +
                    μ2 (2658 - 46 Φ1 + 400 Φ2 - 84 Φ1 Φ2)))) +
          η (256 - 878 μ2 - 1128 μ2^2 + μ1^2 (792 - 48 Φ1) + 480 Φ1 +
            30 μ2 Φ1 + μ1 (1048 + 708 Φ1 - 6 μ2 (69 + 103 Φ1)) +
            3 θp (μ1^2 (370 + Φ1^2 + 53 Φ2 + Φ1 (103 + 9 Φ2)) +
                2 × (104 + 52 Φ1 + 30 Φ1^2 + 2 μ2^2 (174 + 75 Φ1 - 29 Φ2) + 20 Φ2 -
                    30 Φ1 Φ2 + μ2 (567 + 227 Φ1 + 30 Φ1^2 + 118 Φ2 - 30 Φ1 Φ2)) +
                μ1 (578 + 159 Φ1 + 109 Φ1^2 + 93 Φ2 - 99 Φ1 Φ2 +
                    2 μ2 (835 + 171 Φ1 + 30 Φ1^2 + 156 Φ2 - 6 Φ1 Φ2)))) +
          2 η^3 (384 + 101 μ2 + 12 μ2^2 + 300 Φ1 + 75 μ2 Φ1 - 4 μ1^2
                (128 + 61 Φ1) - μ1 (128 + 3851 μ2 - 980 Φ1 + 285 μ2 Φ1) +
            5 θp (4 μ2^2 (106 + 9 Φ1 - 123 Φ2) + 2 μ2 (1233 + 92 Φ1 + 15 Φ1^2 +
                    15 Φ2 - 15 Φ1 Φ2) + 6 × (114 + 13 Φ1 + 5 Φ1^2 - 3 Φ2 - 5 Φ1 Φ2) +
                μ1^2 (922 + 23 Φ1^2 + 83 Φ2 + Φ1 (57 + 11 Φ2)) +
                μ1 (1606 + 207 Φ1 + 125 Φ1^2 + 65 Φ2 - 91 Φ1 Φ2 +
                    2 μ2 (1405 + 15 Φ1^2 + 149 Φ2 - 17 Φ1 (4 + 3 Φ2)))))) -
    x^4 (-1 + η)^4 (-((-1 + η) θp (140 η^5 (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) -
            70 η^4 (-39 - 58 μ2 + 28 μ2^2 - 11 Φ1 - 8 μ1^2 (3 + Φ1) +
                μ1 (-63 - 22 μ2 - 19 Φ1 + 6 μ2 Φ1) +
                2 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + 10 η^3 (798 + 1809 μ2 -
                912 μ2^2 + 110 Φ1 + 77 μ2 Φ1 + 14 μ1^2 (75 + 17 Φ1) +
                μ1 (1848 + 1373 μ2 + 474 Φ1 - 229 μ2 Φ1) + 7 ηt (-39 - 58 μ2 +
                    28 μ2^2 - 11 Φ1 + μ1 (-39 + 10 μ2 - 11 Φ1 + 6 μ2 Φ1)) +
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$$
\begin{aligned}
&2 \times \Big(111 + 497\,\mu2 + 424\,\mu2^2 + 59\,\Phi1 + 69\,\mu2\,\Phi1 + 2\,\mu1^2 \\
&\quad (99 + \Phi1) + \mu1\,(309 + 665\,\mu2 + 79\,\Phi1 + 15\,\mu2\,\Phi1) + \\
&\quad \eta t\,\Big(-90 + 95\,\mu2 + 240\,\mu2^2 - 96\,\Phi1 - 25\,\mu2\,\Phi1 + 4\,\mu1^2 \\
&\qquad (21 + 37\,\Phi1) + \mu1\,(-6 + 283\,\mu2 - 188\,\Phi1 + 161\,\mu2\,\Phi1)\Big)\Big) + \\
&\eta\,\Big(2 \times \Big(1131 + 4257\,\mu2 + 3168\,\mu2^2 + 421\,\Phi1 + 725\,\mu2\,\Phi1 + 10\,\mu1^2 \\
&\qquad (225 + 19\,\Phi1) + \mu1\,(3381 + 5841\,\mu2 + 881\,\Phi1 - 241\,\mu2\,\Phi1)\Big) + \\
&\quad \eta t\,\Big(-1158 - 517\,\mu2 + 2616\,\mu2^2 - 510\,\Phi1 - 175\,\mu2\,\Phi1 + 4\,\mu1^2\,(341 + \\
&\qquad 167\,\Phi1) + \mu1\,(206 + 5227\,\mu2 - 1090\,\Phi1 + 1325\,\mu2\,\Phi1)\Big)\Big) + \\
&10\,\eta^2\,\Big(690 + 1943\,\mu2 + 52\,\mu2^2 + 138\,\Phi1 + 257\,\mu2\,\Phi1 + 24\,\mu1^2 \\
&\quad (51 + 8\,\Phi1) + \mu1\,(1914 + 2243\,\mu2 + 492\,\Phi1 - 223\,\mu2\,\Phi1) + \\
&\quad \eta t\,\Big(-279 + 588\,\mu2^2 - 75\,\Phi1 - 6\,\mu2\,(46 + \Phi1) + 2\,\mu1^2\,(65 + 7\,\Phi1) + \\
&\qquad \mu1\,(-149 - 97\,\Phi1 + 12\,\mu2\,(56 + 13\,\Phi1))\Big)\Big)\Big)\Big) + \\
&(-1 + \eta t)\,\theta l\,\Big(2 \times \Big(36 - 208\,\mu2^2 + \mu1^2\,(92 - 28\,\Phi1) + 80\,\Phi1 + \\
&\quad \mu2\,(-173 + 5\,\Phi1) + \mu1\,(128 - 101\,\mu2 + 118\,\Phi1 - 103\,\mu2\,\Phi1)\Big) + \\
&\theta p\,\Big(8\,\mu2^2\,(64 + 27\,\Phi1 - 12\,\Phi2) + \mu2\,\Big(822 + 329\,\Phi1 + 45\,\Phi1^2 + \\
&\quad 165\,\Phi2 - 45\,\Phi1\,\Phi2\Big) + 3 \times \Big(50 + 25\,\Phi1 + 15\,\Phi1^2 + 9\,\Phi2 - 15\,\Phi1\,\Phi2\Big) + \\
&\quad \mu1^2\,\Big(272 + \Phi1^2 + 37\,\Phi2 + \Phi1\,(75 + 7\,\Phi2)\Big) + \mu1 \\
&\quad \Big(422 + 114\,\Phi1 + 82\,\Phi1^2 + 64\,\Phi2 - 74\,\Phi1\,\Phi2 + \\
&\qquad \mu2\,\Big(1222 + 241\,\Phi1 + 45\,\Phi1^2 + 221\,\Phi2 - 9\,\Phi1\,\Phi2\Big)\Big)\Big) + \\
&\eta\,\Big(4\,\Big(\mu1^2\,(232 - 122\,\Phi1) + 2 \times \Big(-84\,\mu2^2 + 90 \times (1 + \Phi1) + \\
&\qquad \mu2\,(-7 + 15\,\Phi1)\Big) + \mu1\,(412 + 385\,\Phi1 - 2\,\mu2\,(22 + 93\,\Phi1))\Big) + \\
&\quad \theta p\,\Big(1362 + 359\,\Phi1 + 225\,\Phi1^2 + 4\,\mu2^2\,(606 + 153\,\Phi1 - 437\,\Phi2) - \\
&\qquad 21\,\Phi2 - 225\,\Phi1\,\Phi2 + \mu2\,\Big(6060 + 1279\,\Phi1 + 225\,\Phi1^2 + 281\,\Phi2 - 225 \\
&\qquad \Phi1\,\Phi2\Big) + 2\,\mu1^2\,\Big(1315 + 27\,\Phi1^2 + 95\,\Phi2 + \Phi1\,(109 + 22\,\Phi2)\Big) + \\
&\qquad \mu1\,\Big(3992 + 517\,\Phi1 + 579\,\Phi1^2 + 169\,\Phi2 - 481\,\Phi1\,\Phi2 + \\
&\qquad \mu2\,\Big(9508 + 23\,\Phi1 + 225\,\Phi1^2 + 973\,\Phi2 - 285\,\Phi1\,\Phi2\Big)\Big)\Big)\Big) + \\
&10\,\eta^3\,\Big(-4 \times \Big(8\,\mu2 + \mu1\,(39 + 148\,\mu2 - 9\,\Phi1) + 3\,\mu1^2\,(13 + \Phi1)\Big) + \\
&\quad \theta p\,\Big(519 + 35\,\Phi1 + 2\,\mu2\,(843 + 26\,\Phi1 + 28\,\Phi2) - 4\,\mu2^2\,(-36 + 35\,\Phi2) + \\
&\qquad \mu1^2\,\Big(494 + 12\,\Phi1^2 + 58\,\Phi2 + \Phi1\,(47 + 5\,\Phi2)\Big) + \\
&\qquad \mu1\,\Big(1013 + 166\,\Phi1 + 33\,\Phi1^2 + 58\,\Phi2 - 16\,\Phi1\,\Phi2 - \\
&\qquad 2\,\mu2\,(-641 + 20\,\Phi1 - 89\,\Phi2 + 21\,\Phi1\,\Phi2)\Big)\Big)\Big) + \\
&\eta^2\,\Big(792 + 298\,\mu2 + 96\,\mu2^2 + 600\,\Phi1 + 150\,\mu2\,\Phi1 - 8\,\mu1^2 \\
&\quad (127 + 79\,\Phi1) - 2\,\mu1\,(112 - 980\,\Phi1 + \mu2\,(3259 + 285\,\Phi1)) + \\
&\quad 5\,\theta p\,\Big(990 + 111\,\Phi1 + 45\,\Phi1^2 + 4\,\mu2^2\,(158 + 9\,\Phi1 - 189\,\Phi2) - \\
&\qquad 33\,\Phi2 - 45\,\Phi1\,\Phi2 + \mu2\,\Big(3540 + 45\,\Phi1^2 + \Phi1\,(251 - 45\,\Phi2) + 21\,\Phi2\Big) + \\
&\qquad 2\,\mu1^2\,\Big(673 + 17\,\Phi1^2 + 53\,\Phi2 + \Phi1\,(33 + 8\,\Phi2)\Big) + \\
&\qquad \mu1\,\Big(187\,\Phi1^2 + \Phi1\,(285 - 137\,\Phi2) + 73 \times (32 + \Phi2) + \\
&\qquad \mu2\,\Big(4060 + 45\,\Phi1^2 + 377\,\Phi2 - \Phi1\,(269 + 153\,\Phi2)\Big)\Big)\Big)\Big)\Big) + \\
&x^2\,(-1 + \eta)^2\,\Big(-56\,\eta t\,\theta p - 108\,\eta t\,\theta p\,\mu1 - 52\,\eta t\,\theta p\,\mu1^2 - 11\,\theta l\,\mu2 + \\
&\quad 11\,\eta t\,\theta l\,\mu2 - 406\,\eta t\,\theta p\,\mu2 - 11\,\theta l\,\mu1\,\mu2 + 11 \\
&\quad \eta t\,\theta l\,\mu1\,\mu2 - 414\,\eta t\,\theta p\,\mu1\,\mu2 - 8\,\theta l\,\mu2^2 + 8 \\
&\quad \eta t\,\theta l\,\mu2^2 - 328\,\eta t\,\theta p\,\mu2^2 + 40\,\eta t\,\theta p\,\Phi1 + 44 \\
&\quad \eta t\,\theta p\,\mu1\,\Phi1 - 20\,\eta t\,\theta p\,\mu1^2\,\Phi1 - 5\,\theta l\,\mu2\,\Phi1 + 5
\end{aligned}
$$

```
ηt θl μ2 Φ1 - 10 ηt θp μ2 Φ1 - 5 θl μ1 μ2
Φ1 + 5 ηt θl μ1 μ2 Φ1 - 82 ηt θp μ1 μ2 Φ1 + 56
η^8 θp (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1)) - 14 η^7 θp
(-105 - 158 μ2 + 84 μ2^2 - 29 Φ1 - 16 μ1^2 (3 + Φ1) +
   μ1 (-153 - 34 μ2 - 45 Φ1 + 18 μ2 Φ1) +
   4 ηt (3 + 4 μ2 + Φ1 + μ1 (3 + Φ1))) + 2 η^6 θp
(14 μ1^2 (201 + 43 Φ1) + μ1 (5019 + 3281 μ2 + 1229 Φ1 - 921 μ2 Φ1) +
   3 × (735 + 1643 μ2 - 1324 μ2^2 + 83 Φ1 + 77 μ2 Φ1) +
   7 ηt (-105 - 158 μ2 + 84 μ2^2 - 29 Φ1 +
      μ1 (-105 - 29 Φ1 + 6 μ2 (5 + 3 Φ1)))) - 2
η^3 (θp (2 × (870 + 1264 μ2^2 + 256 Φ1 + 184 μ1^2 (9 + Φ1) +
            μ2 (2911 + 521 Φ1) + μ1 (2526 + μ2 (3799 - 373 Φ1) + 656 Φ1)) +
         ηt (1248 μ2^2 + μ1^2 (1300 - 88 Φ1) + 66 × (-9 + Φ1) -
            μ2 (991 + 25 Φ1) + μ1 (706 + 44 Φ1 + μ2 (4341 + 359 Φ1)))) +
   (-1 + ηt) θl (360 + 1112 μ1 + 752 μ1^2 - 28 μ2 - 336 μ1 μ2 -
         336 μ2^2 + 360 Φ1 + 774 μ1 Φ1 - 60 μ1^2 Φ1 + 60 μ2 Φ1 - 372 μ1 μ2 Φ1 +
         θp (1506 + 407 Φ1 + 225 Φ1^2 + 4 μ2^2 (638 + 189 Φ1 - 401 Φ2) + 27 Φ2 -
            225 Φ1 Φ2 + μ2 (6720 + 1467 Φ1 + 225 Φ1^2 + 473 Φ2 - 225 Φ1 Φ2) +
            μ1^2 (2770 + 52 Φ1^2 + 260 Φ2 + Φ1 (284 + 42 Φ2)) +
            μ1 (4276 + 631 Φ1 + 577 Φ1^2 + 287 Φ2 - 483 Φ1 Φ2 +
               μ2 (10 184 + 339 Φ1 + 225 Φ1^2 + 1269 Φ2 - 285 Φ1 Φ2)))))) +
η^4 (2 θp (-1569 - 1413 μ2 + 7648 μ2^2 + 71 Φ1 + 155 μ2 Φ1 -
         20 μ1^2 (81 + 29 Φ1) + μ1 (-3189 + 1131 μ2 - 779 Φ1 + 989 μ2 Φ1) +
         ηt (261 + 959 μ2 - 252 μ2^2 - 135 Φ1 - 145 μ2 Φ1 +
            12 μ1^2 (46 + 37 Φ1) + μ1 (813 + 2451 μ2 - 615 Φ1 + 545 μ2 Φ1))) -
   (-1 + ηt) θl (372 - 144 μ1 - 516 μ1^2 + 53 μ2 - 4443 μ1 μ2 -
         24 μ2^2 + 300 Φ1 + 980 μ1 Φ1 - 172 μ1^2 Φ1 + 75 μ2 Φ1 - 285 μ1 μ2 Φ1 +
         5 θp (8 μ2^2 (80 + 9 Φ1 - 90 Φ2) + μ2 (3858 + 301 Φ1 + 45 Φ1^2 + 69 Φ2 -
               45 Φ1 Φ2) + 3 × (354 + 41 Φ1 + 15 Φ1^2 - 7 Φ2 - 15 Φ1 Φ2) +
            μ1^2 (1420 + 35 Φ1^2 + 143 Φ2 + Φ1 (105 + 17 Φ2)) +
            μ1 (μ2 (4370 - 139 Φ1 + 45 Φ1^2 + 517 Φ2 - 153 Φ1 Φ2) +
               2 × (1241 + 168 Φ1 + 94 Φ1^2 + 61 Φ2 - 68 Φ1 Φ2))))) -
η^2 (2 θp (6 × (102 + 469 μ2 + 384 μ2^2 + 54 Φ1 + 65 μ2 Φ1 + 3 μ1^2
               (63 + Φ1) + μ1 (291 + 637 μ2 + 75 Φ1 + 17 μ2 Φ1)) +
         ηt (-508 - 259 μ2 + 588 μ2^2 - 336 Φ1 - 129 μ2 Φ1 + 12 μ1^2
               (11 + 38 Φ1) + μ1 (-376 + 1317 μ2 - 786 Φ1 + 627 μ2 Φ1))) +
   (-1 + ηt) θl (2 × (148 - 359 μ2 - 504 μ2^2 + 240 Φ1 + 15 μ2 Φ1 +
            12 μ1^2 (43 + 3 Φ1) + μ1 (664 + 354 Φ1 - 3 μ2 (37 + 103 Φ1))) +
         3 θp (μ1^2 (566 + Φ1^2 + 85 Φ2 + Φ1 (159 + 13 Φ2)) +
            2 × (162 + 81 Φ1 + 45 Φ1^2 + μ2^2 (532 + 234 Φ1 - 78 Φ2) + 33 Φ2 -
               45 Φ1 Φ2 + μ2 (879 + 352 Φ1 + 45 Φ1^2 + 189 Φ2 - 45 Φ1 Φ2)) +
            μ1 (890 + 249 Φ1 + 163 Φ1^2 + 151 Φ2 - 149 Φ1 Φ2 +
               2 μ2 (1283 + 272 Φ1 + 45 Φ1^2 + 247 Φ2 - 9 Φ1 Φ2)))))) + η
```

```
(-4 θp (3 × (9 + 41 μ2 + 16 μ2^2 - μ1^2 (-9 + Φ1) + 5 Φ1 + 3 μ2 Φ1 +
        μ1 (18 + 41 μ2 + 4 Φ1 + 3 μ2 Φ1)) +
      ηt (-30 + 313 μ2 + 344 μ2^2 - 110 Φ1 - 13 μ2 Φ1 + μ1^2
         (-43 + 73 Φ1) + μ1 (-73 + 273 μ2 - 163 Φ1 + 149 μ2 Φ1))) +
   (-1 + ηt) θl (4 × (4 + 92 μ2^2 + μ1^2 (-13 + Φ1) - 20 Φ1 +
        μ2 (107 + 5 Φ1) + μ1 (-9 - 22 Φ1 + μ2 (105 + 41 Φ1))) +
      3 θp (-60 - 31 Φ1 - 15 Φ1^2 - 21 Φ2 + 15 Φ1 Φ2 - 4 μ2^2
         (50 + 27 Φ1 + 11 Φ2) - μ2 (312 + 145 Φ1 + 15 Φ1^2 + 103 Φ2 -
           15 Φ1 Φ2) + 2 μ1^2 (Φ1^2 - 9 × (3 + Φ2) - Φ1 (20 + Φ2)) -
        μ1 (114 + 59 Φ1 + 19 Φ1^2 + 39 Φ2 - 19 Φ1 Φ2 +
           μ2 (312 + 161 Φ1 + 15 Φ1^2 + 103 Φ2 + 9 Φ1 Φ2)))))) - 2
η^5 (-2 × (-1 + ηt) θl (24 μ2 + μ1 (151 + 564 μ2 - 25 Φ1) +
      μ1^2 (151 + 11 Φ1)) + θp (-951 - 3921 μ1 - 2970 μ1^2 -
      4148 μ2 - 7016 μ1 μ2 - 1840 μ2^2 - 315 Φ1 -
      993 μ1 Φ1 - 246 μ1^2 Φ1 - 1064 μ2 Φ1 + 568 μ1 μ2 Φ1 -
      3 θl (543 + 35 Φ1 + 2 μ2 (894 + 27 Φ1 + 28 Φ2) - 4 μ2^2 (-32 + 35 Φ2) +
        μ1^2 (520 + 13 Φ1^2 + 71 Φ2 + Φ1 (62 + 6 Φ2)) +
        μ1 (1063 + 181 Φ1 + 34 Φ1^2 + 71 Φ2 - 15 Φ1 Φ2 +
           μ2 (1376 + 222 Φ2 - 6 Φ1 (1 + 7 Φ2)))) +
      ηt (-2352 μ2^2 + 244 μ1 (-1 + Φ1) + 144 × (4 + Φ1) - 20 μ1^2
         (41 + 4 Φ1) + 6 μ2 (27 + 5 Φ1) - 6 μ1 μ2 (625 + 109 Φ1) + 3 θl
         (543 + 35 Φ1 + 2 μ2 (894 + 27 Φ1 + 28 Φ2) - 4 μ2^2 (-32 + 35 Φ2) +
           μ1^2 (520 + 13 Φ1^2 + 71 Φ2 + Φ1 (62 + 6 Φ2)) +
           μ1 (1063 + 181 Φ1 + 34 Φ1^2 + 71 Φ2 - 15 Φ1 Φ2 +
              μ2 (1376 + 222 Φ2 - 6 Φ1 (1 + 7 Φ2)))))))))) /
(96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
   (w +
      x +
      η -
      w
        η - x
        η)^3 (-1 + ηt) θl θp))
```

```
βΦ2 = ((-1 + η) ×
   (-2 f (-1 + w (-1 + η)) (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η) (1 + x + η - x η)^2
      θl (-2 + Φ2 + Φ2^2) (x^2 (-1 + η)^2 θp (6 - 4 η^2 - 2 ηt - 6 θl + 6 ηt θl + 2 η
            (-1 + ηt) × (1 + θl) - 5 θl Φ2 + 5 ηt θl Φ2 + w (-1 + η) × (-10 + 2 η^2 - 2
               η (-4 + ηt) + 2 ηt + 5 θl (2 + Φ2) - 5 ηt θl (2 + Φ2))) + x (-1 + η) ×
         (2 (w (-1 + η) - 2 η) (-1 + η) × (-3 - 2 η + w (-1 + η) × (5 + η - ηt) + ηt) θp -
            (-1 + ηt) θl (10 + 10 w^2 (-1 + η)^2 + θp (4 η^2 - 5 × (2 + Φ2) + 2 η (6 + 5 Φ2)) - w
               (-1 + η) × (20 + θp (-14 + 22 η - 5 Φ2 + 10 η Φ2)))) +
         θp (-4 η^4 - 2 w^2 (-1 + η)^3 (5 + η) (η - ηt) - 10 ηt + 2 η^3 (-1 + ηt) × (1 + θl) +
            5 η θl (2 + Φ2) - 5 η ηt (-2 + θl (2 + Φ2)) +
```

```
        η^2 (6 - θl (6 + 5 Φ2) + ηt (-2 + θl (6 + 5 Φ2))) +
        w (-1 + η) × (2 η^4 - 2 η^3 (-6 + ηt) + 20 ηt + η^2 (-8 - (-1 + ηt) θl (12 + 5 Φ2)) +
            η (-6 - 14 θl - 5 θl Φ2 + ηt (-18 + 14 θl + 5 θl Φ2)))) +
cv cσ (x (-1 + η) - η) (1 + x + η - x η)^2 ((x + η - x η)^2 (-1 + ηt) θl θp
      (1 + μ1) × (-1 + Φ2) × (14 x (-1 + η) - 14 η - 5 × (2 + Φ1 + Φ2)) +
    w^4 (-1 + η)^4 (x (-1 + η) × (4 × (-1 + η) θp (5 - 7 μ1 + η (1 + μ1) × (-1 + Φ2) -
                ηt (1 + μ1) × (-1 + Φ2) + Φ2 - 5 μ1 Φ2) + (-1 + ηt) θl
            (-20 × (1 + μ1) × (-1 + Φ2) + θp (-64 + 15 Φ1 (-1 + Φ2) + 21 Φ2 -
                5 Φ2^2 + μ1 (-16 + 15 Φ1 (-1 + Φ2) + 93 Φ2 + 19 Φ2^2)))) +
        θp (-4 η^3 (1 + μ1) × (-1 + Φ2) - 20 ηt (1 + μ1) × (-1 + Φ2) + 4 η^2
            (ηt (1 + μ1) × (-1 + Φ2) + 6 × (-1 + μ1 + μ1 Φ2)) + η
            (4 × (5 + Φ2 - μ1 (7 + 5 Φ2)) + θl (-64 + 15 Φ1 (-1 + Φ2) + 21 Φ2 -
                5 Φ2^2 + μ1 (-16 + 15 Φ1 (-1 + Φ2) + 93 Φ2 + 19 Φ2^2)) +
              ηt (16 × (1 + μ1) × (-1 + Φ2) + θl (64 - 15 Φ1 (-1 + Φ2) - 21 Φ2 +
                    5 Φ2^2 + μ1 (16 - 15 Φ1 (-1 + Φ2) - 93 Φ2 - 19 Φ2^2))))) +
    w (-1 + η) × (-4 x^3 (-1 + η)^3 θp (-7 + 14 θl + 5 μ1 + 2 θl μ1 + 3 η^2 (1 + μ1) ×
            (-1 + Φ2) + ηt (1 + μ1) × (-1 + Φ2) + Φ2 - 8 θl Φ2 + 7 μ1 Φ2 - 14 θl μ1
            Φ2 + 2 ηt θl (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2)) + η (-ηt (1 + 2 θl) × (1 + μ1) ×
                (-1 + Φ2) + 2 × (5 - μ1 + θl (1 + μ1) × (-1 + Φ2) - 2 Φ2 - 5 μ1 Φ2))) +
        x^2 (-1 + η)^2 θp (36 η^3 (1 + μ1) × (-1 + Φ2) + (-1 + ηt) θl (1 + μ1) ×
            (-1 + Φ2) × (58 + 15 Φ1 + 15 Φ2) - 12 η^2 (ηt (1 + 2 θl) × (1 + μ1) ×
                (-1 + Φ2) + 2 × (-5 + μ1 - θl (1 + μ1) × (-1 + Φ2) + 2 Φ2 + 5 μ1 Φ2)) +
            12 η (-7 + 5 μ1 + ηt (1 + μ1) × (-1 + Φ2) + Φ2 + 7 μ1 Φ2 - 2 θl
                (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2)) + 2 ηt θl (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2)))) +
        x (-1 + η) × (-12 × (-1 + η) η^2 θp (7 - 5 μ1 + 3 η (1 + μ1) × (-1 + Φ2) -
                ηt (1 + μ1) × (-1 + Φ2) - Φ2 - 7 μ1 Φ2) + (-1 + ηt) θl
            (20 × (1 + μ1) × (-1 + Φ2) + θp (30 + 15 Φ1 + 24 η^3 (1 + μ1) × (-1 + Φ2) -
                11 Φ2 - 15 Φ1 Φ2 + 5 Φ2^2 - 2 η (1 + μ1) × (-1 + Φ2) ×
                  (58 + 15 Φ1 + 15 Φ2) + μ1 (30 - 15 Φ1 (-1 + Φ2) - 59 Φ2 - 19 Φ2^2) -
                24 η^2 (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2)))) +
        θp (12 η^5 (1 + μ1) × (-1 + Φ2) + 20 ηt (1 + μ1) × (-1 + Φ2) + η^2
            (-1 + ηt) θl (1 + μ1) × (-1 + Φ2) × (58 + 15 Φ1 + 15 Φ2) - 4 η^4
            (ηt (1 + 2 θl) × (1 + μ1) × (-1 + Φ2) + 2 × (-5 + μ1 - θl (1 + μ1) ×
                  (-1 + Φ2) + 2 Φ2 + 5 μ1 Φ2)) + 4 η^3 (-7 + 5 μ1 + ηt (1 + μ1) ×
                (-1 + Φ2) + Φ2 + 7 μ1 Φ2 - 2 θl (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2)) +
              2 ηt θl (-7 + 4 Φ2 + μ1 (-1 + 7 Φ2))) + η (θl (30 - 15 Φ1 (-1 + Φ2) -
                11 Φ2 + 5 Φ2^2 + μ1 (30 - 15 Φ1 (-1 + Φ2) - 59 Φ2 - 19 Φ2^2)) +
              ηt (-20 × (1 + μ1) × (-1 + Φ2) + θl (-30 + 15 Φ1 (-1 + Φ2) + 11 Φ2 -
                    5 Φ2^2 + μ1 (-30 + 15 Φ1 (-1 + Φ2) + 59 Φ2 + 19 Φ2^2))))) +
    w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (-10 + 17 θl + 14 μ1 - 7 θl μ1 + 2 η^2
            (1 + μ1) × (-1 + Φ2) + 2 ηt (1 + μ1) × (-1 + Φ2) - 2 Φ2 - 5 θl
            Φ2 + 10 μ1 Φ2 - 17 θl μ1 Φ2 + ηt θl (-17 + 5 Φ2 + μ1 (7 + 17 Φ2)) - 2
            η (ηt (1 + μ1) × (-1 + Φ2) + 6 × (-1 + μ1 + μ1 Φ2))) -
        x^2 (-1 + η)^2 θp (-56 + 142 θl + 40 μ1 + 46 θl μ1 + 15 θl Φ1 + 15 θl μ1
```

```
Φ1 + 12 η^3 (1 + μ1) × (-1 + Φ2) + 8 ηt (1 + μ1) × (-1 + Φ2) + 8 Φ2 - 79 θl
Φ2 + 56 μ1 Φ2 - 127 θl μ1 Φ2 - 15 θl Φ1 Φ2 - 15 θl μ1 Φ1 Φ2 - 15 θl Φ2^2 - 15
θl μ1 Φ2^2 - 12 η^2 (ηt (1 + μ1) × (-1 + Φ2) + 2 × (-1 + 2 μ1) × (2 + Φ2)) + ηt
θl (-142 + 15 Φ1 (-1 + Φ2) + 79 Φ2 + 15 Φ2^2 +
   μ1 (-46 + 15 Φ1 (-1 + Φ2) + 127 Φ2 + 15 Φ2^2)) + 2 η
(10 + 34 μ1 + 2 ηt (1 + μ1) × (-1 + Φ2) - 22 Φ2 - 10 μ1 Φ2 - θl (-43 +
      7 Φ2 + μ1 (29 + 43 Φ2)) + ηt θl (-43 + 7 Φ2 + μ1 (29 + 43 Φ2)))) +
x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) × (-1 + Φ2) - 3 η
      (-1 + ηt (1 + μ1) × (-1 + Φ2) - 5 Φ2 + μ1 (11 + Φ2)) -
   4 × (-7 + ηt (1 + μ1) × (-1 + Φ2) + Φ2 + μ1 (5 + 7 Φ2))) + (-1 + ηt) θl
(-60 × (1 + μ1) × (-1 + Φ2) + θp (-104 - 45 Φ1 + 47 Φ2 + 45 Φ1 Φ2 - 15 Φ2^2 +
      μ1 (-104 + 45 Φ1 (-1 + Φ2) + 191 Φ2 + 57 Φ2^2) + η^2 (-2 × (35 + Φ2) +
         μ1 (74 + 70 Φ2)) + 2 η (-142 + 15 Φ1 (-1 + Φ2) + 79 Φ2 +
         15 Φ2^2 + μ1 (-46 + 15 Φ1 (-1 + Φ2) + 127 Φ2 + 15 Φ2^2)))))) -
θp (-4 η^4 (12 μ1 + ηt (1 + μ1) × (-1 + Φ2) - 6 Φ2) + 4 η^5 (1 + μ1) ×
   (-1 + Φ2) + 60 ηt (1 + μ1) × (-1 + Φ2) + 2 η^3
   (-2 ηt (1 + μ1) × (-1 + Φ2) + 6 × (5 + μ1 - 3 Φ2 - 5 μ1 Φ2) +
      3 θl (3 + Φ2 - μ1 (5 + 3 Φ2)) + 3 ηt θl (-3 - Φ2 + μ1 (5 + 3 Φ2))) + η^2
   (8 × (-7 + Φ2 + μ1 (5 + 7 Φ2)) - θl (-142 + 15 Φ1 (-1 + Φ2) +
         79 Φ2 + 15 Φ2^2 + μ1 (-46 + 15 Φ1 (-1 + Φ2) + 127 Φ2 + 15 Φ2^2)) +
      ηt (8 × (1 + μ1) × (-1 + Φ2) + θl (-142 + 15 Φ1 (-1 + Φ2) + 79 Φ2 +
         15 Φ2^2 + μ1 (-46 + 15 Φ1 (-1 + Φ2) + 127 Φ2 + 15 Φ2^2)))) + η
   (θl (104 - 45 Φ1 (-1 + Φ2) - 47 Φ2 + 15 Φ2^2 + μ1 (104 - 45 Φ1
            (-1 + Φ2) - 191 Φ2 - 57 Φ2^2)) + ηt
         (-60 × (1 + μ1) × (-1 + Φ2) + θl (-104 + 45 Φ1 (-1 + Φ2) + 47 Φ2 -
            15 Φ2^2 + μ1 (-104 + 45 Φ1 (-1 + Φ2) + 191 Φ2 + 57 Φ2^2)))))) +
w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (-40 + 78 θl + 56 μ1 - 18 θl μ1 + 5 θl Φ1 +
      5 θl μ1 Φ1 + 8 η^2 (1 + μ1) × (-1 + Φ2) + 8 ηt (1 + μ1) ×
      (-1 + Φ2) - 8 Φ2 - 25 θl Φ2 + 40 μ1 Φ2 - 73 θl μ1 Φ2 - 5
      θl Φ1 Φ2 - 5 θl μ1 Φ1 Φ2 - 5 θl Φ2^2 - 5 θl μ1 Φ2^2 - 8 η
      (ηt (1 + μ1) × (-1 + Φ2) + 6 × (-1 + μ1 + μ1 Φ2)) + ηt θl (-78 + 5 Φ1
         (-1 + Φ2) + 25 Φ2 + 5 Φ2^2 + μ1 (18 + 5 Φ1 (-1 + Φ2) + 73 Φ2 + 5 Φ2^2))) -
x (-1 + η) × (4 × (-1 + η) θp (7 - 5 μ1 + 4 η^2 (1 + μ1) × (-1 + Φ2) -
      ηt (1 + μ1) × (-1 + Φ2) - Φ2 - 7 μ1 Φ2 +
      η (17 - 31 μ1 - 4 ηt (1 + μ1) × (-1 + Φ2) + 7 Φ2 - 17 μ1 Φ2)) + (-1 + ηt)
   θl (-60 × (1 + μ1) × (-1 + Φ2) + θp (-146 - 45 Φ1 + 65 Φ2 +
         45 Φ1 Φ2 - 15 Φ2^2 + μ1 (-98 + 45 Φ1 (-1 + Φ2) + 233 Φ2 + 57 Φ2^2) +
         2 η (-74 + 5 Φ1 (-1 + Φ2) + 21 Φ2 + 5 Φ2^2 +
            μ1 (22 + 5 Φ1 (-1 + Φ2) + 69 Φ2 + 5 Φ2^2))))) +
θp (8 η^4 (1 + μ1) × (-1 + Φ2) + 60 ηt (1 + μ1) × (-1 + Φ2) - 4 η^3
   (2 ηt (1 + μ1) × (-1 + Φ2) - 3 × (3 + Φ2) + 3 μ1 (5 + 3 Φ2)) + η^2
   (48 μ1 - 24 Φ2 - θl (-70 + 5 Φ1 (-1 + Φ2) + 17 Φ2 +
         5 Φ2^2 + μ1 (26 + 5 Φ1 (-1 + Φ2) + 65 Φ2 + 5 Φ2^2)) +
      ηt (4 × (1 + μ1) × (-1 + Φ2) + θl (-70 + 5 Φ1 (-1 + Φ2) + 17 Φ2 +
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$$5\,\Phi2^2 + \mu1\,\left(26 + 5\,\Phi1\,(-1+\Phi2) + 65\,\Phi2 + 5\,\Phi2^2\right)\Big)\Big)\Big) + \eta$$
$$\Big(4\times(-7+\Phi2+\mu1\,(5+7\,\Phi2)) + \theta l\,\Big(146 - 45\,\Phi1\,(-1+\Phi2) -$$
$$65\,\Phi2 + 15\,\Phi2^2 + \mu1\,\left(98 - 45\,\Phi1\,(-1+\Phi2) - 233\,\Phi2 - 57\,\Phi2^2\right)\Big) +$$
$$\eta t\,\Big(-56\times(1+\mu1)\times(-1+\Phi2) + \theta l\,\Big(-146 + 45\,\Phi1\,(-1+\Phi2) + 65\,\Phi2 -$$
$$15\,\Phi2^2 + \mu1\,\left(-98 + 45\,\Phi1\,(-1+\Phi2) + 233\,\Phi2 + 57\,\Phi2^2\right)\Big)\Big)\Big)\Big)\Big)\Big) +$$
$$2\,c\sigma^2\,(-1+\eta)\times\Big(2\,x^6\,(-1+\eta)^6\,\theta p\,\Big(-2 + 2\,\theta l + 3\,\mu1 + 9\,w\,\mu1 + 4\,w^2\,\mu1 +$$
$$\theta l\,\mu1 - w\,\theta l\,\mu1 + 17\,\mu1^2 + 21\,w\,\mu1^2 + 4\,w^2\,\mu1^2 -$$
$$13\,\theta l\,\mu1^2 - 13\,w\,\theta l\,\mu1^2 + w^2\,\eta^4\,(1+\mu1)\times(-1+\Phi2) -$$
$$w\,\eta^3\,(3 + w\,(3 + \eta t - 4\,\mu1))\times(1+\mu1)\times(-1+\Phi2) + 2\,\Phi2 - 2\,\theta l\,\Phi2 -$$
$$9\,\mu1\,\Phi2 - 15\,w\,\mu1\,\Phi2 - 4\,w^2\,\mu1\,\Phi2 + 5\,\theta l\,\mu1\,\Phi2 + 7\,w\,\theta l\,\mu1\,\Phi2 -$$
$$5\,\mu1^2\,\Phi2 - 9\,w\,\mu1^2\,\Phi2 - 4\,w^2\,\mu1^2\,\Phi2 + \theta l\,\mu1^2\,\Phi2 + w\,\theta l\,\mu1^2\,\Phi2 +$$
$$\eta^2\,\Big(2\times(1+\mu1)\times(-1+\Phi2) + 3\,w^2\,(1+\eta t - 4\,\mu1)\times(1+\mu1)\times(-1+\Phi2) + 3\,w$$
$$\left(\mu1 + \mu1^2\,(7 - 3\,\Phi2) + 2\times(-1+\Phi2) + \eta t\,(1+\mu1)\times(-1+\Phi2) - 3\,\mu1\,\Phi2\right)\Big) +$$
$$\eta t\,\Big(2\times(1+\mu1)\times(-1+\Phi2) + w^2\,(1+\mu1)\times(-1+\Phi2) - \theta l$$
$$\left(2 + \mu1 + \mu1^2\,(-13+\Phi2) - 2\,\Phi2 + 5\,\mu1\,\Phi2\right) + w$$
$$\left(-\theta l\,\mu1^2\,(-13+\Phi2) + 3\times(-1+\Phi2) + \mu1\,(-3 + \theta l + 3\,\Phi2 - 7\,\theta l\,\Phi2)\right)\Big) +$$
$$\eta\,\Big(4 + 2\,\eta t - \mu1 + 2\,\eta t\,\mu1 - 17\,\mu1^2 - w^2\,(1 + 3\,\eta t - 12\,\mu1)\times(1+\mu1)\times$$
$$(-1+\Phi2) - 4\,\Phi2 - 2\,\eta t\,\Phi2 + 7\,\mu1\,\Phi2 - 2\,\eta t\,\mu1\,\Phi2 + 5\,\mu1^2\,\Phi2 + w\,\Big(3 - 3\,\Phi2 +$$
$$\mu1\,(-15 + \theta l + 27\,\Phi2 - 7\,\theta l\,\Phi2) + \mu1^2\,(-42 + 13\,\theta l + 18\,\Phi2 - \theta l\,\Phi2) +$$
$$\eta t\,\left(6 + \theta l\,\mu1^2\,(-13+\Phi2) - 6\,\Phi2 + \mu1\,(6 - \theta l - 6\,\Phi2 + 7\,\theta l\,\Phi2)\right)\Big)\Big)\Big) +$$
$$\theta p\,\Big(w^4\,(-1+\eta)^5\,\Big(2\,\eta^5\,(1+\mu1)\times(-1+\Phi2) + 5\,\eta t\,(1+\mu1)\,\mu2\,(-1+\Phi2) + 2\,\eta\,\eta t$$
$$\left(-1 + 5\,\mu1\,(-2+\mu2)\times(-1+\Phi2) + 5\,\mu2\,(-1+\Phi2) - 5\,\Phi2 + \mu1^2\,(23+\Phi2)\right) - 2$$
$$\eta^4\,\Big(-4\,\mu1^2\,(-1+\Phi2) + \eta t\,(1+\mu1)\times(-1+\Phi2) - 2\times(-1 + 3\,\mu2 + \Phi2) +$$
$$6\,\mu1\,(1 + \mu2 - \Phi2 + \mu2\,\Phi2)\Big) + 2\,\eta^3\,\Big(13\,\mu2 + 6\,\Phi2 + 11\,\mu2\,\Phi2 +$$
$$\mu1^2\,(-19 + 7\,\Phi2) + 2\,\eta t\,(1 + \mu1 - 3\,\mu2 - \Phi2 - \mu1\,\Phi2 + 3\,\mu1\,\mu2\,(1+\Phi2)) -$$
$$\mu1\,(19 - 13\,\Phi2 + \mu2\,(35 + 13\,\Phi2))\Big) + \eta^2$$
$$\Big(2 + 10\,\Phi2 - 12\,\eta t\,\Phi2 + \mu2\,(-10 - 17\,\eta t + 22\,\Phi2 + 5\,\eta t\,\Phi2) +$$
$$\mu1^2\,(6\times(-5+\Phi2) + \eta t\,(70 + 26\,\Phi2)) + \mu1\,(2\times(-14 - 17\,\mu2 +$$
$$8\,\Phi2 + 5\,\mu2\,\Phi2) + \eta t\,(-2 + 7\,\mu2 - 22\,\Phi2 + 17\,\mu2\,\Phi2))\Big)\Big) -$$
$$w^3\,(-1+\eta)^3\,\Big(4\,\eta^7\,(1+\mu1)\times(-1+\Phi2) - 15\,\eta t\,(1+\mu1)\,\mu2\,(-1+\Phi2) -$$
$$2\,\eta^6\,\Big(5 - 12\,\mu2 - 13\,\mu1\,(-1+\Phi2) - 8\,\mu1^2\,(-1+\Phi2) +$$
$$2\,\eta t\,(1+\mu1)\times(-1+\Phi2) - 5\,\Phi2 + 12\,\mu1\,\mu2\,(1+\Phi2)\Big) - 2$$
$$\eta\,\eta t\,\Big(-4 - 17\,\mu2 - 20\,\Phi2 + 5\,\mu2\,\Phi2 + 4\,\mu1^2\,(20+\Phi2) +$$
$$\mu1\,(40 - 34\,\Phi2 + \mu2\,(7 + 17\,\Phi2))\Big) + 2\,\eta^5\,\Big(1 + 32\,\mu2 + 11\,\Phi2 + 22\,\mu2\,\Phi2 +$$
$$3\,\mu1^2\,(-17 + 5\,\Phi2) - 2\,\mu1\,(19 + 38\,\mu2 - 16\,\Phi2 + 16\,\mu2\,\Phi2) +$$
$$\eta t\,(5 - 12\,\mu2 - 5\,\Phi2 + \mu1\,(5 - 5\,\Phi2 + 12\,\mu2\,(1+\Phi2)))\Big) + \eta^2$$
$$\Big(-8 + 12\,\mu2 + \theta l\,\Phi1 - 5\,\theta l\,\mu2\,\Phi1 - 2\,\mu1^2\,(12\,\theta l\,(\Phi1 - \Phi2) + 5\times(-13+\Phi2)) +$$
$$\mu1\,(98 - 12\,\mu2\,(-9+\Phi2) + 11\,\theta l\,(\Phi1 - \Phi2)\,(-1+\Phi2) +$$
$$5\,\theta l\,\mu2\,(\Phi1 - \Phi2)\,(-1+\Phi2) - 62\,\Phi2) - 40\,\Phi2 - \theta l\,\Phi2 -$$
$$60\,\mu2\,\Phi2 + 5\,\theta l\,\mu2\,\Phi2 + 5\,\theta l\,\Phi1\,\Phi2 + 5\,\theta l\,\mu2\,\Phi1\,\Phi2 - 5\,\theta l\,\Phi2^2 -$$
$$5\,\theta l\,\mu2\,\Phi2^2 + \eta t\,\Big(-2 - \theta l\,\Phi1 - 5\,\theta l\,\mu2\,(\Phi1 - \Phi2)\,(-1+\Phi2) +$$
$$26\,\Phi2 + \theta l\,\Phi2 - 5\,\theta l\,\Phi1\,\Phi2 + 5\,\theta l\,\Phi2^2 + 24\,\mu2\,(2+\Phi2) +$$
$$\mu1\,(10 - 11\,\theta l\,(\Phi1 - \Phi2)\,(-1+\Phi2) - 5\,\theta l\,\mu2\,(\Phi1 - \Phi2)\,(-1+\Phi2) + 62$$
$$\Phi2 - 48\,\mu2\,(2+\Phi2)) + 12\,\mu1^2\,(2\,\theta l\,(\Phi1 - \Phi2) - 5\times(3+\Phi2))\Big)\Big) +$$

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η^4 (18 + 4 μ2 + θl Φ1 - 5 θl μ2 Φ1 + 30 Φ2 - θl Φ2 + 68 μ2 Φ2 +
    5 θl μ2 Φ2 + 5 θl Φ1 Φ2 + 5 θl μ2 Φ1 Φ2 - 5 θl Φ2^2 - 5 θl μ2 Φ2^2 -
    6 μ1^2 (19 + 4 θl (Φ1 - Φ2) + Φ2) + μ1 (36 × (-2 + Φ2) + 11 θl (Φ1 - Φ2)
        (-1 + Φ2) + 5 θl μ2 (Φ1 - Φ2) (-1 + Φ2) - 4 μ2 (35 + Φ2)) +
    ηt (-2 - θl Φ1 - 5 θl μ2 (Φ1 - Φ2) (-1 + Φ2) - 22 Φ2 + θl Φ2 -
        5 θl Φ1 Φ2 + 5 θl Φ2^2 - 9 μ2 (7 + Φ2) + 4 μ1^2
         (31 + 6 θl (Φ1 - Φ2) + 5 Φ2) + μ1 (26 - 11 θl (Φ1 - Φ2) (-1 + Φ2) -
           5 θl μ2 (Φ1 - Φ2) (-1 + Φ2) - 50 Φ2 + 9 μ2 (9 + 7 Φ2))) ) + 2
  η^3 (1 - 52 μ2 + θl Φ1 - 5 θl μ2 Φ1 - 13 Φ2 - θl Φ2 - 26 μ2 Φ2 +
    5 θl μ2 Φ2 + 5 θl Φ1 Φ2 + 5 θl μ2 Φ1 Φ2 - 5 θl Φ2^2 - 5 θl μ2 Φ2^2 -
    3 μ1^2 (-17 + 8 θl (Φ1 - Φ2) + 5 Φ2) + μ1 (40 + 11 θl (Φ1 - Φ2) (-1 + Φ2) +
        5 θl μ2 (Φ1 - Φ2) (-1 + Φ2) - 34 Φ2 + 52 μ2 (2 + Φ2)) +
    ηt (-9 - θl Φ1 - 15 Φ2 + θl Φ2 - 5 θl Φ1 Φ2 + 5 θl Φ2^2 +
        12 μ1^2 (9 + 2 θl (Φ1 - Φ2) + 2 Φ2) + 5 μ2 (-1 + Φ2) ×
         (1 + θl (-Φ1 + Φ2)) + μ1 (15 - 11 θl (Φ1 - Φ2) (-1 + Φ2) -
           33 Φ2 + 5 μ2 (-1 + Φ2) × (1 + θl (-Φ1 + Φ2))))) ) +
w^2 (-1 + η)^2 (2 η^8 (1 + μ1) × (-1 + Φ2) - 15 ηt (1 + μ1) μ2 (-1 + Φ2) -
    2 η^7 (7 - 6 μ2 - 4 μ1^2 (-1 + Φ2) + ηt (1 + μ1) × (-1 + Φ2) -
        7 Φ2 + μ1 (11 + 6 μ2 - 11 Φ2 + 6 μ2 Φ2)) - 12 η ηt
     (-1 - 6 μ2 - 5 Φ2 + μ1^2 (17 + Φ2) + μ1 (10 - 7 Φ2 + 6 μ2 (1 + Φ2))) + 2 η^6
     (-6 + 43 μ2 + 12 Φ2 + 11 μ2 Φ2 + 3 μ1^2 (-19 + 7 Φ2) - μ1 (39 + 65 μ2 - 45 Φ2 +
          43 μ2 Φ2) + ηt (7 - 6 μ2 - 7 Φ2 + μ1 (7 - 7 Φ2 + 6 μ2 (1 + Φ2)))) +
    η^5 (26 + 72 μ2 + 46 Φ2 + 108 μ2 Φ2 + 2 μ1^2 (-121 + 13 Φ2) +
        θl μ1^2 (-52 + 3 Φ1 (-5 + Φ2) + 15 Φ2 + Φ2^2) -
        36 μ1 (4 - 3 Φ2 + 2 μ2 (4 + Φ2)) + 2 θl (1 + 5 Φ2 + μ2 (7 + 11 Φ2)) -
        θl μ1 (26 + 3 Φ1 - 25 Φ2 - 9 Φ1 Φ2 + 5 Φ2^2 + 2 μ2 (17 + 13 Φ2 + 6 Φ2^2)) +
        ηt (14 - 68 μ2 - 14 Φ2 - 4 μ2 Φ2 + 8 μ1^2 (5 + Φ2) -
            θl μ1^2 (-52 + 3 Φ1 (-5 + Φ2) + 15 Φ2 + Φ2^2) - 2 θl (1 + 5 Φ2 +
                μ2 (7 + 11 Φ2)) + 2 μ1 (3 - 15 Φ2 + μ2 (38 + 34 Φ2)) + θl μ1
             (26 + 3 Φ1 - 25 Φ2 - 9 Φ1 Φ2 + 5 Φ2^2 + 2 μ2 (17 + 13 Φ2 + 6 Φ2^2)))) +
    η^4 (28 - 26 μ1 - 30 μ1^2 - 108 μ2 + 36 μ1 μ2 + 20 Φ2 - 34 μ1 Φ2 -
        42 μ1^2 Φ2 + 36 μ2 Φ2 + 108 μ1 μ2 Φ2 + θl (μ1^2 (-56 + 89 Φ2 + 3 Φ2^2 +
                Φ1 (-89 + 5 Φ2)) + μ1 (-26 - 38 Φ1 + 56 Φ2 + 44 Φ1 Φ2 - 36 Φ2^2 +
                3 μ2 (-2 + 5 Φ1 (-1 + Φ2) + 3 Φ2 - 9 Φ2^2)) + 3 × (2 + Φ1 + Φ2 +
                5 Φ1 Φ2 - 5 Φ2^2 + μ2 (-2 + 5 Φ1 (-1 + Φ2) + 11 Φ2 - 5 Φ2^2))) +
        ηt (-22 - 97 μ2 - 50 Φ2 - 23 μ2 Φ2 + 4 μ1^2 (83 + 13 Φ2) +
            μ1 (70 + 143 μ2 - 118 Φ2 + 97 μ2 Φ2) +
            θl (μ1^2 (56 + Φ1 (89 - 5 Φ2) - 89 Φ2 - 3 Φ2^2) +
                μ1 (26 + 38 Φ1 - 56 Φ2 - 44 Φ1 Φ2 + 36 Φ2^2 - 3 μ2 (-2 + 5 Φ1
                        (-1 + Φ2) + 3 Φ2 - 9 Φ2^2)) - 3 × (2 + Φ1 + Φ2 + 5 Φ1 Φ2 -
                    5 Φ2^2 + μ2 (-2 + 5 Φ1 (-1 + Φ2) + 11 Φ2 - 5 Φ2^2))))) -
    η^3 (2 × (6 + 38 μ2 + 30 Φ2 + 58 μ2 Φ2 + μ1^2 (-125 + 17 Φ2) -
            μ1 (83 + 154 μ2 - 65 Φ2 + 38 μ2 Φ2)) -
        θl (μ1^2 (44 + Φ1 (-133 + Φ2) + 133 Φ2 + 3 Φ2^2) + 6 ×
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                (1 + Φ1 - 4 Φ2 + 5 Φ1 Φ2 - 5 Φ2^2 + μ2 (-9 + 5 Φ1 (-1 + Φ2) - 5 Φ2^2)) +
            μ1 (26 - 67 Φ1 + 37 Φ2 + 61 Φ1 Φ2 - 57 Φ2^2 + 6 μ2
                (15 + 5 Φ1 (-1 + Φ2) + 16 Φ2 - 3 Φ2^2))) + ηt (4 × (7 + μ2 +
              μ1^2 (-43 + Φ2) + 11 Φ2 - μ2 Φ2 + μ1 (-30 + μ2 + 15 Φ2 - μ2 Φ2)) +
            θl (μ1^2 (44 + Φ1 (-133 + Φ2) + 133 Φ2 + 3 Φ2^2) + 6 × (1 + Φ1 -
                4 Φ2 + 5 Φ1 Φ2 - 5 Φ2^2 + μ2 (-9 + 5 Φ1 (-1 + Φ2) - 5 Φ2^2)) +
              μ1 (26 - 67 Φ1 + 37 Φ2 + 61 Φ1 Φ2 - 57 Φ2^2 + 6 μ2
                (15 + 5 Φ1 (-1 + Φ2) + 16 Φ2 - 3 Φ2^2)))))) +
        η^2 (2 × (-7 + 72 μ1^2 + μ1 (53 + μ2 (43 - 7 Φ2) - 29 Φ2) + μ2
              (7 - 25 Φ2) - 23 Φ2) + θl (2 + 3 Φ1 - 17 Φ2 + 15 Φ1 Φ2 -
            15 Φ2^2 + μ2 (-34 + 15 Φ1 (-1 + Φ2) - 11 Φ2 - 15 Φ2^2) +
            μ1^2 (48 + 59 Φ2 + Φ2^2 - Φ1 (59 + Φ2)) + μ1 (26 - 32 Φ1 + 6 Φ2 +
              26 Φ1 Φ2 - 26 Φ2^2 + μ2 (62 + 15 Φ1 (-1 + Φ2) + 61 Φ2 - 3 Φ2^2))) +
          ηt (8 + 94 μ2 + 64 Φ2 + 38 μ2 Φ2 - 4 μ1^2 (85 + 11 Φ2) - 2 μ1 (46 -
              70 Φ2 + μ2 (85 + 47 Φ2)) + θl (-2 - 3 Φ1 + 17 Φ2 - 15 Φ1 Φ2 + 15
               Φ2^2 + μ2 (34 - 15 Φ1 (-1 + Φ2) + 11 Φ2 + 15 Φ2^2) + μ1^2 (-48 - 59
                Φ2 - Φ2^2 + Φ1 (59 + Φ2)) - μ1 (26 - 32 Φ1 + 6 Φ2 + 26 Φ1 Φ2 -
               26 Φ2^2 + μ2 (62 + 15 Φ1 (-1 + Φ2) + 61 Φ2 - 3 Φ2^2)))))) -
    w (-1 + η) × (6 η^8 (1 + μ1) × (-1 + Φ2) - 5 ηt (1 + μ1) μ2 (-1 + Φ2) -
        2 η^7 (7 - 18 μ2 + μ1^2 (21 - 9 Φ2) + 3 ηt (1 + μ1) × (-1 + Φ2) - 7 Φ2 +
            2 μ1 (8 - 11 Φ2 + 9 μ2 (1 + Φ2))) - 2 η ηt (-4 - 31 μ2 - 20 Φ2 -
            5 μ2 Φ2 + 4 μ1^2 (14 + Φ2) + μ1 (40 - 22 Φ2 + μ2 (41 + 31 Φ2))) + η^5
          (34 - 20 μ2 + 38 Φ2 + 80 μ2 Φ2 + 20 μ1 (-5 + μ2 (-7 + Φ2) + 2 Φ2) -
            2 μ1^2 (79 + 5 Φ2) + θl (6 × (2 + 3 μ2 + 2 Φ2 + 7 μ2 Φ2) +
              μ1^2 (-106 + 31 Φ2 + 3 Φ2^2 + Φ1 (-31 + 7 Φ2)) -
              μ1 (46 + 7 Φ1 - 43 Φ2 - 19 Φ1 Φ2 + 9 Φ2^2 + 6 μ2 (9 + 7 Φ2 + 4 Φ2^2))) +
            ηt (2 - 64 μ2 - 2 Φ2 - 8 μ2 Φ2 + 12 μ1^2 (7 + Φ2) - 6 θl (2 + 3 μ2 +
                2 Φ2 + 7 μ2 Φ2) + θl μ1^2 (106 + Φ1 (31 - 7 Φ2) - 31 Φ2 - 3 Φ2^2) +
              2 μ1 (-5 - 19 Φ2 + 8 μ2 (5 + 4 Φ2)) + θl μ1 (46 + 7 Φ1 -
                43 Φ2 - 19 Φ1 Φ2 + 9 Φ2^2 + 6 μ2 (9 + 7 Φ2 + 4 Φ2^2)))) + η^6
          (μ1^2 (-154 + 34 Φ2 + θl (-28 + Φ1 (-1 + Φ2) + 3 Φ2 + Φ2^2)) +
            2 × (5 + 7 Φ2 + μ2 (38 + 22 Φ2 + θl (5 + Φ2))) - μ1 (72 - 84 Φ2 + 4 μ2
               (41 + 19 Φ2) + θl (4 + Φ1 - 15 Φ2 - Φ1 Φ2 - Φ2^2 + 2 μ2 (7 + 5 Φ2))) -
            ηt (μ1^2 (4 - 4 Φ2 + θl (-28 + Φ1 (-1 + Φ2) + 3 Φ2 + Φ2^2)) +
              2 × (7 × (-1 + Φ2) + μ2 (12 + θl (5 + Φ2))) -
              μ1 (2 × (5 - 5 Φ2 + 12 μ2 (1 + Φ2)) +
                θl (4 + Φ1 - 15 Φ2 - Φ1 Φ2 - Φ2^2 + 2 μ2 (7 + 5 Φ2))))) +
        η^4 (2 (μ1^2 (55 - 19 Φ2) - 4 μ2 (16 + 5 Φ2) + μ1 (19 - 37 Φ2 +
                8 μ2 (13 + 8 Φ2))) + θl (20 + 3 Φ1 + Φ2 + 15 Φ1 Φ2 - 15 Φ2^2 +
            3 μ2 (-14 + 5 Φ1 (-1 + Φ2) + 15 Φ2 - 5 Φ2^2) + μ1^2 (-58 +
                101 Φ2 + 5 Φ2^2 + 3 Φ1 (-35 + 3 Φ2)) + μ1 (-38 + 42 Φ2 - 40 Φ2^2 +
                6 Φ1 (-7 + 9 Φ2) + 3 μ2 (10 + 5 Φ1 (-1 + Φ2) + 11 Φ2 - 13 Φ2^2))) -
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η t (26 - 78 μ1 - 296 μ1^2 + 53 μ2 - 91 μ1 μ2 + 46 Φ2 + 102 μ1 Φ2 -
    40 μ1^2 Φ2 + 19 μ2 Φ2 - 53 μ1 μ2 Φ2 + θl (20 + 3 Φ1 + Φ2 + 15 Φ1 Φ2 -
        15 Φ2^2 + 3 μ2 (-14 + 5 Φ1 (-1 + Φ2) + 15 Φ2 - 5 Φ2^2) +
        μ1^2 (-58 + 101 Φ2 + 5 Φ2^2 + 3 Φ1 (-35 + 3 Φ2)) +
        μ1 (-38 + 42 Φ2 - 40 Φ2^2 + 6 Φ1 (-7 + 9 Φ2) +
            3 μ2 (10 + 5 Φ1 (-1 + Φ2) + 11 Φ2 - 13 Φ2^2)))) -
η^3 (4 × (5 + 2 μ1^2 (-25 + Φ2) + 13 Φ2 + 6 μ2 (-1 + 3 Φ2) + 3 μ1
        (-11 + 2 μ2 (-5 + Φ2) + 7 Φ2)) -
    θl (4 + 6 Φ1 + 30 μ2 Φ1 (-1 + Φ2) - 34 Φ2 + 30 Φ1 Φ2 - 30 Φ2^2 +
        μ1^2 (90 + Φ1 (-121 + Φ2) + 121 Φ2 + 5 Φ2^2) -
        2 μ2 (49 + 14 Φ2 + 15 Φ2^2) + μ1 (46 - 67 Φ1 + 15 Φ2 + 55 Φ1 Φ2 -
            49 Φ2^2 + 2 μ2 (83 + 15 Φ1 (-1 + Φ2) + 76 Φ2 - 3 Φ2^2))) +
    η t (2 × (8 + μ1 (-62 + μ2 (-1 + Φ2) - 4 Φ2) + μ2 (-1 + Φ2) + 16 Φ2 +
            2 μ1^2 (7 + 11 Φ2)) + θl (4 + 6 Φ1 + 30 μ2 Φ1 (-1 + Φ2) - 34 Φ2 +
            30 Φ1 Φ2 - 30 Φ2^2 + μ1^2 (90 + Φ1 (-121 + Φ2) + 121 Φ2 + 5 Φ2^2) -
            2 μ2 (49 + 14 Φ2 + 15 Φ2^2) + μ1 (46 - 67 Φ1 + 15 Φ2 + 55 Φ1 Φ2 -
                49 Φ2^2 + 2 μ2 (83 + 15 Φ1 (-1 + Φ2) + 76 Φ2 - 3 Φ2^2))))) +
η^2 (4 × (1 + μ1) × (-1 - 3 μ2 (-1 + Φ2) - 5 Φ2 + μ1 (11 + Φ2)) +
    θl ((-4 + 3 Φ1 - 3 Φ2) × (1 + 5 Φ2) +
        3 μ2 (-16 + 5 Φ1 (-1 + Φ2) - 11 Φ2 - 5 Φ2^2) +
        2 μ1^2 (35 + 24 Φ2 + Φ2^2 - Φ1 (23 + Φ2)) + μ1 (42 - 31 Φ1 + Φ2 +
            19 Φ1 Φ2 - 19 Φ2^2 + 3 μ2 (32 + 5 Φ1 (-1 + Φ2) + 29 Φ2 + 3 Φ2^2))) +
    η t (-4 (μ1^2 (59 + Φ2) - 3 × (1 + 5 Φ2 + 2 μ2 (3 + Φ2)) + 2 μ1 (16 - 13 Φ2 +
                3 μ2 (5 + 3 Φ2))) + θl (-((-4 + 3 Φ1 - 3 Φ2) × (1 + 5 Φ2)) +
            3 μ2 (16 + 5 Φ1 + 11 Φ2 - 5 Φ1 Φ2 + 5 Φ2^2) - 2 μ1^2 (35 +
                24 Φ2 + Φ2^2 - Φ1 (23 + Φ2)) - μ1 (42 - 31 Φ1 + Φ2 + 19 Φ1 Φ2 -
                19 Φ2^2 + 3 μ2 (32 + 5 Φ1 (-1 + Φ2) + 29 Φ2 + 3 Φ2^2))))) +
η (4 η^7 (1 + μ1) × (-1 + Φ2) - 2 η^6 (-12 μ2 + μ1^2 (17 - 5 Φ2) + 2 η t
        (1 + μ1) × (-1 + Φ2) + μ1 (5 - 11 Φ2 + 12 μ2 (1 + Φ2))) + η t (2 + 10 Φ2 -
        2 μ1^2 (11 + Φ2) + μ2 (19 + 5 Φ2) - μ1 (20 - 8 Φ2 + μ2 (29 + 19 Φ2))) + η^5
    (4 η t (1 - 3 μ2 + μ1^2 (-1 + Φ2) - Φ2 + 3 μ1 μ2 (1 + Φ2)) + 2 × (5 + 4 μ1^2
            (-7 + Φ2) + Φ2 + μ2 (7 + 11 Φ2) - μ1 (11 + 29 μ2 - 11 Φ2 + 7 μ2 Φ2)) +
    θl (4 - 4 Φ2 + 2 μ2 (5 + Φ2) + μ1^2 (-28 + Φ1 (-1 + Φ2) + 3 Φ2 + Φ2^2) +
        μ1 (Φ1 (-1 + Φ2) + Φ2 (11 + Φ2) - 2 μ2 (7 + 5 Φ2))) - η t θl
        (4 - 4 Φ2 + 2 μ2 (5 + Φ2) + μ1^2 (-28 + Φ1 (-1 + Φ2) + 3 Φ2 + Φ2^2) +
        μ1 (Φ1 (-1 + Φ2) + Φ2 (11 + Φ2) - 2 μ2 (7 + 5 Φ2)))) - η^3
    (6 - 26 μ1 - 56 μ1^2 + 30 μ2 - 90 μ1 μ2 + 6 Φ2 + 26 μ1 Φ2 + 8 μ1^2 Φ2 +
        30 μ2 Φ2 - 30 μ1 μ2 Φ2 - θl (6 + Φ1 + 5 Φ2 + 5 Φ1 Φ2 -
            5 Φ2^2 + μ2 (-36 + 5 Φ1 (-1 + Φ2) + 17 Φ2 - 5 Φ2^2) +
            2 μ1^2 (-1 + 2 Φ1 (-10 + Φ2) + 18 Φ2 + Φ2^2) +
            μ1 (3 Φ1 (-5 + 7 Φ2) + μ2 (36 + 5 Φ1 (-1 + Φ2) + 29 Φ2 - 17 Φ2^2) +
                5 × (-4 + Φ2 - 3 Φ2^2))) + η t (8 + 7 μ2 + 16 Φ2 + 5 μ2 Φ2 -
```

$$
\begin{aligned}
&8\,\mu1^2\,(11+\Phi2)-\mu1\,(32+17\,\mu2-32\,\Phi2+7\,\mu2\,\Phi2)+\\
&\theta l\,\Big(6+\Phi1+5\,\Phi2+5\,\Phi1\,\Phi2-5\,\Phi2^2+\mu2\,\big(-36+5\,\Phi1\,(-1+\Phi2)+17\,\Phi2-\\
&\quad 5\,\Phi2^2\big)+2\,\mu1^2\,\big(-1+2\,\Phi1\,(-10+\Phi2)+18\,\Phi2+\Phi2^2\big)+\mu1\\
&\quad \big(3\,\Phi1\,(-5+7\,\Phi2)+\mu2\,\big(36+5\,\Phi1\,(-1+\Phi2)+29\,\Phi2-17\,\Phi2^2\big)+\\
&\quad 5\times\big(-4+\Phi2-3\,\Phi2^2\big)\big)\big)\Big)+\eta^2\,\Big(-2\times\big(2+4\,\mu2\,(-4+\Phi2)+\\
&10\,\Phi2-2\,\mu1^2\,(11+\Phi2)+4\,\mu1\,(-5+2\,\Phi2+\mu2\,(2+4\,\Phi2))+\\
&\theta l\,\big(-((-1+\Phi1-\Phi2)\times(1+5\,\Phi2))+\mu1^2\,\big(-23+18\,\Phi1-18\,\Phi2-\Phi2^2\big)+\\
&\quad \mu2\,\big(22+5\,\Phi1+9\,\Phi2-5\,\Phi1\,\Phi2+5\,\Phi2^2\big)-\mu1\,\big(10-11\,\Phi1+\\
&\quad 8\,\Phi1\,\Phi2-7\,\Phi2^2+\mu2\,\big(38+5\,\Phi1\,(-1+\Phi2)+33\,\Phi2+\Phi2^2\big)\big)\big)\big)+\\
&\eta t\,\Big(-2+\mu2-10\,\Phi2-\mu2\,\Phi2-18\,\mu1^2\,(3+\Phi2)+\mu1\,(\mu2-\mu2\,\Phi2+\\
&\quad 20\times(2+\Phi2))+2\,\theta l\,\big(-((-1+\Phi1-\Phi2)\times(1+5\,\Phi2))+\\
&\quad \mu1^2\,\big(-23+18\,\Phi1-18\,\Phi2-\Phi2^2\big)+\\
&\quad \mu2\,\big(22+5\,\Phi1+9\,\Phi2-5\,\Phi1\,\Phi2+5\,\Phi2^2\big)-\mu1\,\big(10-11\,\Phi1+8\,\Phi1\,\Phi2-\\
&\quad 7\,\Phi2^2+\mu2\,\big(38+5\,\Phi1\,(-1+\Phi2)+33\,\Phi2+\Phi2^2\big)\big)\big)\big)-2\\
&\eta^4\,\Big(-2+15\,\mu1+5\,\mu1^2+20\,\mu2-4\,\mu1\,\mu2-10\,\Phi2+3\,\mu1\,\Phi2+\\
&7\,\mu1^2\,\Phi2-8\,\mu2\,\Phi2-20\,\mu1\,\mu2\,\Phi2-\\
&\theta l\,\big(5+\Phi2+2\,\mu2\,(1+5\,\Phi2)+\mu1^2\,\big(-27+2\,\Phi1\,(-4+\Phi2)+8\,\Phi2+\Phi2^2\big)-\\
&\quad \mu1\,\big(10+2\,\Phi1-9\,\Phi2-5\,\Phi1\,\Phi2+2\,\Phi2^2+2\,\mu2\,\big(5+4\,\Phi2+3\,\Phi2^2\big)\big)\big)+\\
&\eta t\,\big(-2\times\big(-1+\Phi2-\mu2\,(5+\Phi2)+\mu1^2\,(11+\Phi2)+\\
&\quad \mu1\,(-2-4\,\Phi2+\mu2\,(7+5\,\Phi2))\big)+\theta l\,\big(5+\Phi2+\\
&\quad 2\,\mu2\,(1+5\,\Phi2)+\mu1^2\,\big(-27+2\,\Phi1\,(-4+\Phi2)+8\,\Phi2+\Phi2^2\big)-\mu1\\
&\quad \big(10+2\,\Phi1-9\,\Phi2-5\,\Phi1\,\Phi2+2\,\Phi2^2+2\,\mu2\,\big(5+4\,\Phi2+3\,\Phi2^2\big)\big)\big)\big)\Big)+\\
&\eta\,\Big(\theta l\,\big(-\mu1^2\,(-2+\Phi1-\Phi2)\times(11+\Phi2)+(-2+\Phi1-\Phi2)\times(1+5\,\Phi2)+\\
&\quad \mu2\,\big(-14+5\,\Phi1\,(-1+\Phi2)-17\,\Phi2-5\,\Phi2^2\big)+\mu1\,\big(2\times(-2+\Phi1-\Phi2)\times\\
&\quad (-5+2\,\Phi2)+\mu2\,\big(34+5\,\Phi1\,(-1+\Phi2)+31\,\Phi2+7\,\Phi2^2\big)\big)\big)+\\
&\eta t\,\Big(4-48\,\mu1-52\,\mu1^2+19\,\mu2-29\,\mu1\,\mu2+20\,\Phi2+24\,\mu1\,\Phi2+\\
&\quad 4\,\mu1^2\,\Phi2+5\,\mu2\,\Phi2-19\,\mu1\,\mu2\,\Phi2+\theta l\,\big(\mu1^2\,(-2+\Phi1-\Phi2)\times(11+\Phi2)-\\
&\quad (-2+\Phi1-\Phi2)\times(1+5\,\Phi2)+\mu2\,\big(14+5\,\Phi1+17\,\Phi2-\\
&\quad 5\,\Phi1\,\Phi2+5\,\Phi2^2\big)-\mu1\,\big(2\times(-2+\Phi1-\Phi2)\times(-5+2\,\Phi2)+\\
&\quad \mu2\,\big(34+5\,\Phi1\,(-1+\Phi2)+31\,\Phi2+7\,\Phi2^2\big)\big)\big)\big)\big)\big)-\\
&x^3\,(-1+\eta)^3\,\Big((-1+\eta)\,\theta p\,\Big(4+40\,\eta+84\,\eta^2-80\,\eta^4-4\,\eta t+16\,\eta\,\eta t+80\\
&\eta^2\,\eta t+80\,\eta^3\,\eta t-40\,\mu1-264\,\eta\,\mu1-336\,\eta^2\,\mu1-200\,\eta^3\,\mu1-80\\
&\eta^4\,\mu1-16\,\eta\,\eta t\,\mu1+64\,\eta^2\,\eta t\,\mu1+80\,\eta^3\,\eta t\,\mu1-44\,\mu1^2-400\,\eta\\
&\mu1^2-900\,\eta^2\,\mu1^2-680\,\eta^3\,\mu1^2+148\,\eta t\,\mu1^2+160\,\eta\,\eta t\,\mu1^2-16\\
&\eta^2\,\eta t\,\mu1^2-12\,\mu2-8\,\eta\,\mu2+116\,\eta^2\,\mu2+240\,\eta^3\,\mu2-39\,\eta t\\
&\mu2-128\,\eta\,\eta t\,\mu2-120\,\eta^2\,\eta t\,\mu2-12\,\mu1\,\mu2-296\,\eta\,\mu1\,\mu2-508\\
&\eta^2\,\mu1\,\mu2-240\,\eta^3\,\mu1\,\mu2+57\,\eta t\,\mu1\,\mu2+160\,\eta\,\eta t\,\mu1\,\mu2+120\\
&\eta^2\,\eta t\,\mu1\,\mu2+20\,\Phi2+104\,\eta\,\Phi2+36\,\eta^2\,\Phi2+80\,\eta^4\,\Phi2-20\,\eta t\\
&\Phi2-16\,\eta\,\eta t\,\Phi2-80\,\eta^2\,\eta t\,\Phi2-80\,\eta^3\,\eta t\,\Phi2+16\,\mu1\,\Phi2+168\,\eta\\
&\mu1\,\Phi2+456\,\eta^2\,\mu1\,\Phi2+440\,\eta^3\,\mu1\,\Phi2+80\,\eta^4\,\mu1\,\Phi2-48\,\eta t\,\mu1\\
&\Phi2-80\,\eta\,\eta t\,\mu1\,\Phi2-64\,\eta^2\,\eta t\,\mu1\,\Phi2-80\,\eta^3\,\eta t\,\mu1\,\Phi2-4\,\mu1^2\\
&\Phi2+16\,\eta\,\mu1^2\,\Phi2+180\,\eta^2\,\mu1^2\,\Phi2+200\,\eta^3\,\mu1^2\,\Phi2+44\,\eta t\,\mu1^2\\
&\Phi2+32\,\eta\,\eta t\,\mu1^2\,\Phi2+16\,\eta^2\,\eta t\,\mu1^2\,\Phi2+12\,\mu2\,\Phi2+152\,\eta\,\mu2\\
&\Phi2+196\,\eta^2\,\mu2\,\Phi2-9\,\eta t\,\mu2\,\Phi2-16\,\eta\,\eta t\,\mu2\,\Phi2+12\,\mu1\,\mu2\,\Phi2+8
\end{aligned}
$$

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η μ1 μ2 Φ2 - 116 η^2 μ1 μ2 Φ2 - 240 η^3 μ1 μ2 Φ2 + 39 ηt μ1 μ2
Φ2 + 128 η ηt μ1 μ2 Φ2 + 120 η^2 ηt μ1 μ2 Φ2 + 2 w^4 (-1 + η)^4
(1 - 18 μ1 - 19 μ1^2 + 7 μ2 - 29 μ1 μ2 + 4 η^2 (1 + μ1) × (-1 + Φ2) +
   5 Φ2 + 12 μ1 Φ2 + 7 μ1^2 Φ2 + 11 μ2 Φ2 - 7 μ1 μ2 Φ2 +
   2 ηt (1 + μ1 - 3 μ2 - Φ2 - μ1 Φ2 + 3 μ1 μ2 (1 + Φ2)) -
   2 η (1 - 3 μ2 - 8 μ1^2 (-1 + Φ2) + 2 ηt (1 + μ1) × (-1 + Φ2) -
      Φ2 + 3 μ1 (3 + μ2 - 3 Φ2 + μ2 Φ2))) - w^3 (-1 + η)^3
(12 + 56 μ2 + 40 η^3 (1 + μ1) × (-1 + Φ2) + 60 Φ2 + 112 μ2 Φ2 +
   8 μ1^2 (-29 + 5 Φ2) + 4 ηt μ1^2 (37 + 11 Φ2) -
   4 μ1 (43 - 31 Φ2 + 14 μ2 (5 + Φ2)) - 3 ηt (-4 + 12 Φ2 + μ2 (29 + 3 Φ2)) +
   ηt μ1 (16 - 64 Φ2 + 3 μ2 (35 + 29 Φ2)) -
   8 η^2 (7 - 12 μ2 - 20 μ1^2 (-1 + Φ2) + 5 ηt (1 + μ1) × (-1 + Φ2) - 7 Φ2 +
      3 μ1 (9 - 9 Φ2 + 4 μ2 (1 + Φ2))) + 4 η (43 μ2 + 24 Φ2 + 44 μ2 Φ2 +
      2 μ1^2 (-59 + 23 Φ2) - μ1 (94 + 131 μ2 - 82 Φ2 + 43 μ2 Φ2) +
      2 ηt (7 - 12 μ2 - 7 Φ2 + μ1 (7 - 7 Φ2 + 12 μ2 (1 + Φ2)))) - w
(-1 + η) × (120 η^4 (1 + μ1) × (-1 + Φ2) + 4 × (6 + μ1^2 (-61 + Φ2) +
      18 Φ2 + μ2 (-4 + 22 Φ2) + μ1 (-43 + 4 μ2 (-10 + Φ2) + 25 Φ2)) -
   40 η^3 (5 - 9 μ2 + μ1^2 (21 - 9 Φ2) + 3 ηt (1 + μ1) × (-1 + Φ2) -
      5 Φ2 + μ1 (14 - 20 Φ2 + 9 μ2 (1 + Φ2))) +
   8 η^2 (4 + 62 μ2 + 26 Φ2 + 52 μ2 Φ2 + 5 μ1^2 (-49 + 13 Φ2) -
      μ1 (121 + 166 μ2 - 151 Φ2 + 62 μ2 Φ2) + ηt (-23 μ1 (-1 + Φ2) +
         2 μ1^2 (-1 + Φ2) + 30 μ1 μ2 (1 + Φ2) - 5 × (-5 + 6 μ2 + 5 Φ2))) +
   ηt (-4 - 68 Φ2 - 3 μ2 (47 + 9 Φ2) + 12 μ1^2 (37 + 11 Φ2) +
      μ1 (8 - 152 Φ2 + 3 μ2 (65 + 47 Φ2))) + 8 η (15 + 28 μ2 + 33 Φ2 +
      62 μ2 Φ2 + 3 μ1^2 (-59 + 7 Φ2) - 2 μ1 (51 - 42 Φ2 + 2 μ2 (38 + 7 Φ2)) +
      ηt (-11 × (-1 + Φ2) + 8 μ1^2 (5 + Φ2) - 4 μ2 (11 + Φ2) +
         μ1 (3 - 27 Φ2 + μ2 (52 + 44 Φ2)))) + w^2 (-1 + η)^2
(40 η^4 (1 + μ1) × (-1 + Φ2) - 40 η^3 (4 - 3 μ2 - 4 μ1^2 (-1 + Φ2) +
      ηt (1 + μ1) × (-1 + Φ2) - 4 Φ2 + μ1 (8 - 8 Φ2 + 3 μ2 (1 + Φ2))) +
   2 × (15 + 51 Φ2 + μ1^2 (-197 + 17 Φ2) + μ2 (19 + 83 Φ2) -
      μ1 (134 - 92 Φ2 + μ2 (185 + 19 Φ2))) +
   ηt (8 - 80 Φ2 - 3 μ2 (59 + 9 Φ2) + 12 μ1^2 (37 + 11 Φ2) +
      μ1 (20 - 164 Φ2 + 3 μ2 (77 + 59 Φ2))) +
   4 η^2 (-25 + 119 μ2 + 55 Φ2 + 55 μ2 Φ2 + 5 μ1^2 (-61 + 25 Φ2) -
      μ1 (210 + 229 μ2 - 240 Φ2 + 119 μ2 Φ2) +
      10 ηt (4 - 3 μ2 - 4 Φ2 + μ1 (4 - 4 Φ2 + 3 μ2 (1 + Φ2)))) +
   4 η (13 + 98 μ2 + 71 Φ2 + 130 μ2 Φ2 + 4 μ1^2 (-91 + 19 Φ2) -
      μ1 (231 - 207 Φ2 + μ2 (358 + 98 Φ2)) +
      ηt (-30 × (-1 + Φ2) + 8 μ1^2 (5 + Φ2) - 4 μ2 (20 + Φ2) +
         μ1 (22 - 46 Φ2 + μ2 (88 + 80 Φ2))))) +
(-1 + ηt) θl (-6 - 12 η + 2 θp - 24 η θp - 100 η^2 θp - 80 η^3 θp + 56
   μ1 + 76 η μ1 - 24 η^2 μ1 - 24 η^3 μ1 - 18 θp μ1 + 86 η θp μ1 + 188
   η^2 θp μ1 - 20 η^3 θp μ1 + 86 μ1^2 + 400 η μ1^2 + 264 η^2 μ1^2 - 24
   η^3 μ1^2 - 44 θp μ1^2 + 14 η θp μ1^2 + 528 η^2 θp μ1^2 + 540 η^3
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$$\theta p\, \mu 1^2 - 38\, \mu 2 - 57\, \eta\, \mu 2 + 34\, \theta p\, \mu 2 + 114\, \eta\, \theta p\, \mu 2 + 20\, \eta^2\, \theta p$$
$$\mu 2 - 100\, \eta^3\, \theta p\, \mu 2 + 58\, \mu 1\, \mu 2 + 87\, \eta\, \mu 1\, \mu 2 - 62\, \theta p\, \mu 1\, \mu 2 - 102$$
$$\eta\, \theta p\, \mu 1\, \mu 2 + 116\, \eta^2\, \theta p\, \mu 1\, \mu 2 + 140\, \eta^3\, \theta p\, \mu 1\, \mu 2 - 2\, \theta p\, \Phi 1 - 4$$
$$\eta\, \theta p\, \Phi 1 + 23\, \theta p\, \mu 1\, \Phi 1 + 63\, \eta\, \theta p\, \mu 1\, \Phi 1 + 34\, \eta^2\, \theta p\, \mu 1\, \Phi 1 + 10$$
$$\eta^3\, \theta p\, \mu 1\, \Phi 1 + 37\, \theta p\, \mu 1^2\, \Phi 1 + 163\, \eta\, \theta p\, \mu 1^2\, \Phi 1 + 154\, \eta^2\, \theta p$$
$$\mu 1^2\, \Phi 1 + 10\, \eta^3\, \theta p\, \mu 1^2\, \Phi 1 + 10\, \theta p\, \mu 2\, \Phi 1 + 20\, \eta\, \theta p\, \mu 2\, \Phi 1 + 10$$
$$\theta p\, \mu 1\, \mu 2\, \Phi 1 + 20\, \eta\, \theta p\, \mu 1\, \mu 2\, \Phi 1 - 30\, \Phi 2 - 60\, \eta\, \Phi 2 + 12\, \theta p$$
$$\Phi 2 - 20\, \eta\, \theta p\, \Phi 2 - 20\, \eta^2\, \theta p\, \Phi 2 + 80\, \eta^3\, \theta p\, \Phi 2 - 32\, \mu 1\, \Phi 2 - 160$$
$$\eta\, \mu 1\, \Phi 2 - 120\, \eta^2\, \mu 1\, \Phi 2 + 24\, \eta^3\, \mu 1\, \Phi 2 - \theta p\, \mu 1\, \Phi 2 - 23\, \eta\, \theta p$$
$$\mu 1\, \Phi 2 - 174\, \eta^2\, \theta p\, \mu 1\, \Phi 2 - 210\, \eta^3\, \theta p\, \mu 1\, \Phi 2 + 10\, \mu 1^2\, \Phi 2 + 56$$
$$\eta\, \mu 1^2\, \Phi 2 + 24\, \eta^2\, \mu 1^2\, \Phi 2 + 24\, \eta^3\, \mu 1^2\, \Phi 2 - 37\, \theta p\, \mu 1^2\, \Phi 2 - 147$$
$$\eta\, \theta p\, \mu 1^2\, \Phi 2 - 154\, \eta^2\, \theta p\, \mu 1^2\, \Phi 2 - 50\, \eta^3\, \theta p\, \mu 1^2\, \Phi 2 - 10\, \mu 2$$
$$\Phi 2 - 15\, \eta\, \mu 2\, \Phi 2 + 16\, \theta p\, \mu 2\, \Phi 2 - 74\, \eta\, \theta p\, \mu 2\, \Phi 2 - 188\, \eta^2\, \theta p\, \mu 2$$
$$\Phi 2 - 20\, \eta^3\, \theta p\, \mu 2\, \Phi 2 + 38\, \mu 1\, \mu 2\, \Phi 2 + 57\, \eta\, \mu 1\, \mu 2\, \Phi 2 - 56\, \theta p\, \mu 1$$
$$\mu 2\, \Phi 2 - 86\, \eta\, \theta p\, \mu 1\, \mu 2\, \Phi 2 + 100\, \eta^2\, \theta p\, \mu 1\, \mu 2\, \Phi 2 + 100\, \eta^3\, \theta p$$
$$\mu 1\, \mu 2\, \Phi 2 - 10\, \theta p\, \Phi 1\, \Phi 2 - 20\, \eta\, \theta p\, \Phi 1\, \Phi 2 - 17\, \theta p\, \mu 1\, \Phi 1\, \Phi 2 - 87$$
$$\eta\, \theta p\, \mu 1\, \Phi 1\, \Phi 2 - 94\, \eta^2\, \theta p\, \mu 1\, \Phi 1\, \Phi 2 - 10\, \eta^3\, \theta p\, \mu 1\, \Phi 1\, \Phi 2 - \theta p$$
$$\mu 1^2\, \Phi 1\, \Phi 2 - 19\, \eta\, \theta p\, \mu 1^2\, \Phi 1\, \Phi 2 - 34\, \eta^2\, \theta p\, \mu 1^2\, \Phi 1\, \Phi 2 - 10\, \eta^3$$
$$\theta p\, \mu 1^2\, \Phi 1\, \Phi 2 - 10\, \theta p\, \mu 2\, \Phi 1\, \Phi 2 - 20\, \eta\, \theta p\, \mu 2\, \Phi 1\, \Phi 2 - 10\, \theta p\, \mu 1$$
$$\mu 2\, \Phi 1\, \Phi 2 - 20\, \eta\, \theta p\, \mu 1\, \mu 2\, \Phi 1\, \Phi 2 + 10\, \theta p\, \Phi 2^2 + 20\, \eta\, \theta p\, \Phi 2^2 + 13$$
$$\theta p\, \mu 1\, \Phi 2^2 + 57\, \eta\, \theta p\, \mu 1\, \Phi 2^2 + 46\, \eta^2\, \theta p\, \mu 1\, \Phi 2^2 - 10\, \eta^3\, \theta p\, \mu 1$$
$$\Phi 2^2 - 3\, \theta p\, \mu 1^2\, \Phi 2^2 - 11\, \eta\, \theta p\, \mu 1^2\, \Phi 2^2 - 14\, \eta^2\, \theta p\, \mu 1^2\, \Phi 2^2 - 10$$
$$\eta^3\, \theta p\, \mu 1^2\, \Phi 2^2 + 10\, \theta p\, \mu 2\, \Phi 2^2 + 20\, \eta\, \theta p\, \mu 2\, \Phi 2^2 - 2\, \theta p\, \mu 1\, \mu 2$$
$$\Phi 2^2 + 68\, \eta\, \theta p\, \mu 1\, \mu 2\, \Phi 2^2 + 120\, \eta^2\, \theta p\, \mu 1\, \mu 2\, \Phi 2^2 + w^4\, (-1 + \eta)^4$$
$$\big(5\, \mu 2\, (-1 + \Phi 2) + 5\, \mu 1\, \mu 2\, (-1 + \Phi 2) - 2 \times (1 + 5\, \Phi 2) -$$
$$4\, \mu 1\, (1 + 5\, \Phi 2) + \mu 1^2\, (70 + 26\, \Phi 2)\big) - w^3\, (-1 + \eta)^3$$
$$\big(-12 + 56\, \mu 1 + 356\, \mu 1^2 - 53\, \mu 2 + 43\, \mu 1\, \mu 2 - 2\, \theta p\, \Phi 1 + 22\, \theta p\, \mu 1\, \Phi 1 +$$
$$48\, \theta p\, \mu 1^2\, \Phi 1 + 10\, \theta p\, \mu 2\, \Phi 1 + 10\, \theta p\, \mu 1\, \mu 2\, \Phi 1 - 60\, \Phi 2 + 2\, \theta p\, \Phi 2 - 128\, \mu 1\, \Phi 2 -$$
$$22\, \theta p\, \mu 1\, \Phi 2 + 76\, \mu 1^2\, \Phi 2 - 48\, \theta p\, \mu 1^2\, \Phi 2 + 5\, \mu 2\, \Phi 2 - 10\, \theta p\, \mu 2\, \Phi 2 +$$
$$53\, \mu 1\, \mu 2\, \Phi 2 - 10\, \theta p\, \mu 1\, \mu 2\, \Phi 2 - 10\, \theta p\, \Phi 1\, \Phi 2 - 22\, \theta p\, \mu 1\, \Phi 1\, \Phi 2 -$$
$$10\, \theta p\, \mu 2\, \Phi 1\, \Phi 2 - 10\, \theta p\, \mu 1\, \mu 2\, \Phi 1\, \Phi 2 + 10\, \theta p\, \Phi 2^2 + 22\, \theta p\, \mu 1\, \Phi 2^2 +$$
$$10\, \theta p\, \mu 2\, \Phi 2^2 + 10\, \theta p\, \mu 1\, \mu 2\, \Phi 2^2 + \eta\, \big(12\, \mu 1^2\, (33 + 8\, \theta p\, (\Phi 1 - \Phi 2) + 5\, \Phi 2) -$$
$$\mu 2\, (57 + 20\, \theta p\, (\Phi 1 - \Phi 2)\, (-1 + \Phi 2) + 15\, \Phi 2) + 4 \times (1 + 5\, \Phi 2) \times$$
$$(-3 + \theta p\, (-\Phi 1 + \Phi 2)) + \mu 1\, (72 - 44\, \theta p\, (\Phi 1 - \Phi 2)\, (-1 + \Phi 2) -$$
$$156\, \Phi 2 + \mu 2\, (87 - 20\, \theta p\, (\Phi 1 - \Phi 2)\, (-1 + \Phi 2) + 57\, \Phi 2))\big)\big) - w^2$$
$$(-1 + \eta)^2\, \big(24 + 129\, \mu 2 + 120\, \Phi 2 + 15\, \mu 2\, \Phi 2 - 84\, \mu 1^2\, (7 + \Phi 2) +$$
$$\theta p\, \mu 1^2\, \big(44 + \Phi 1\, (-133 + \Phi 2) + 133\, \Phi 2 + 3\, \Phi 2^2\big) -$$
$$3\, \mu 1\, (60 - 76\, \Phi 2 + \mu 2\, (53 + 43\, \Phi 2)) +$$
$$6\, \theta p\, \big(1 + \Phi 1 - 4\, \Phi 2 + 5\, \Phi 1\, \Phi 2 - 5\, \Phi 2^2 + \mu 2\, \big(-9 + 5\, \Phi 1\, (-1 + \Phi 2) - 5\, \Phi 2^2\big)\big) +$$
$$\theta p\, \mu 1\, \big(26 - 67\, \Phi 1 + 37\, \Phi 2 + 61\, \Phi 1\, \Phi 2 - 57\, \Phi 2^2 +$$
$$6\, \mu 2\, \big(15 + 5\, \Phi 1\, (-1 + \Phi 2) + 16\, \Phi 2 - 3\, \Phi 2^2\big)\big) +$$
$$\eta\, \big(-9 \times \big(-4 - 19\, \mu 2 - 20\, \Phi 2 - 5\, \mu 2\, \Phi 2 + 4\, \mu 1^2\, (33 + 5\, \Phi 2) +$$
$$\mu 1\, (24 + 29\, \mu 2 - 52\, \Phi 2 + 19\, \mu 2\, \Phi 2)\big) +$$
$$4\, \theta p\, \big(\mu 1^2\, \big(-56 + 89\, \Phi 2 + 3\, \Phi 2^2 + \Phi 1\, (-89 + 5\, \Phi 2)\big) +$$
$$\mu 1\, \big(-26 - 38\, \Phi 1 + 56\, \Phi 2 + 44\, \Phi 1\, \Phi 2 - 36\, \Phi 2^2 + 3\, \mu 2$$

$$\left(-2+5\,\Phi1\,(-1+\Phi2)+3\,\Phi2-9\,\Phi2^2\right)\Big)+3\times\Big(2+\Phi1+\Phi2+5$$
$$\Phi1\,\Phi2-5\,\Phi2^2+\mu2\,\left(-2+5\,\Phi1\,(-1+\Phi2)+11\,\Phi2-5\,\Phi2^2\right)\Big)\Big)\Big)+$$
$$2\,\eta^2\,\Big(-12\,\mu1\,(-1-5\,\Phi2+\mu1\,(11+\Phi2))+5\,\theta\mathrm{p}\,\Big(\mu1^2\,\Big(-52+$$
$$3\,\Phi1\,(-5+\Phi2)+15\,\Phi2+\Phi2^2\Big)+$$
$$2\times(1+5\,\Phi2+\mu2\,(7+11\,\Phi2))-\mu1\,\Big(26+3\,\Phi1-25\,\Phi2-$$
$$9\,\Phi1\,\Phi2+5\,\Phi2^2+2\,\mu2\,\left(17+13\,\Phi2+6\,\Phi2^2\right)\Big)\Big)\Big)\Big)+\mathrm{w}$$
$$(-1+\eta)\times\Big(20-176\,\mu1-388\,\mu1^2+119\,\mu2-169\,\mu1\,\mu2+100\,\Phi2+$$
$$152\,\mu1\,\Phi2-44\,\mu1^2\,\Phi2+25\,\mu2\,\Phi2-119\,\mu1\,\mu2\,\Phi2+2\,\theta\mathrm{p}\,\Big(2+3\,\Phi1-17\,\Phi2+$$
$$15\,\Phi1\,\Phi2-15\,\Phi2^2+\mu2\,\left(-44+15\,\Phi1\,(-1+\Phi2)-13\,\Phi2-15\,\Phi2^2\right)+$$
$$\mu1^2\,\left(44+\Phi1\,(-61+\Phi2)+61\,\Phi2+3\,\Phi2^2\right)+\mu1\,\Big(22-34\,\Phi1+8\,\Phi2+$$
$$28\,\Phi1\,\Phi2-24\,\Phi2^2+\mu2\,\left(76+15\,\Phi1\,(-1+\Phi2)+71\,\Phi2-3\,\Phi2^2\right)\Big)\Big)+$$
$$2\,\eta^3\,\Big(10\,\theta\mathrm{p}\,\mu2\,(5+\Phi2)+\mu1^2\,\Big(-12\times(-1+\Phi2)+5\,\theta\mathrm{p}$$
$$\left(-54+\Phi1\,(-1+\Phi2)+5\,\Phi2+\Phi2^2\right)\Big)+\mu1\,\Big(-12\times(-1+\Phi2)+$$
$$5\,\theta\mathrm{p}\,\left(-6+\Phi1\,(-1+\Phi2)+29\,\Phi2+\Phi2^2-2\,\mu2\,(7+5\,\Phi2)\right)\Big)\Big)+$$
$$\eta\,\Big(-8\,\mu1^2\,(149+22\,\Phi2)+9\times(4+20\,\Phi2+\mu2\,(19+5\,\Phi2))-$$
$$\mu1\,(220-472\,\Phi2+9\,\mu2\,(29+19\,\Phi2))+$$
$$\theta\mathrm{p}\,\Big(2\,\mu2\,\left(-69+30\,\Phi1\,(-1+\Phi2)+93\,\Phi2-30\,\Phi2^2\right)+$$
$$4\times\left(20+\Phi2-15\,\Phi2^2+3\,\Phi1\,(1+5\,\Phi2)\right)+$$
$$\mu1^2\,\left(-238+407\,\Phi2+23\,\Phi2^2+\Phi1\,(-423+39\,\Phi2)\right)+$$
$$\mu1\,\Big(-158+171\,\Phi2-157\,\Phi2^2+3\,\Phi1\,(-57+73\,\Phi2)+$$
$$6\,\mu2\,\left(13+10\,\Phi1\,(-1+\Phi2)+17\,\Phi2-26\,\Phi2^2\right)\Big)\Big)\Big)+8\,\eta^2\,\Big(-6\,\mu1$$
$$(-1-5\,\Phi2+\mu1\,(11+\Phi2))+\theta\mathrm{p}\,\Big(3\times(5+5\,\mu2+5\,\Phi2+17\,\mu2\,\Phi2)+$$
$$\mu1^2\,\left(-131+38\,\Phi2+3\,\Phi2^2+\Phi1\,(-38+8\,\Phi2)\right)-\mu1\,\Big(56+8\,\Phi1-$$
$$53\,\Phi2-23\,\Phi1\,\Phi2+12\,\Phi2^2+\mu2\,\left(57+45\,\Phi2+30\,\Phi2^2\right)\Big)\Big)\Big)\Big)\Big)\Big)-$$
$$\mathrm{x}^4\,(-1+\eta)^4\,\Big(-2\times(-1+\eta)\,\theta\mathrm{p}\,\Big(5+23\,\eta+10\,\eta^2-30\,\eta^3+2\,\eta\mathrm{t}+20\,\eta\,\eta\mathrm{t}+$$
$$30\,\eta^2\,\eta\mathrm{t}-33\,\mu1-82\,\eta\,\mu1-65\,\eta^2\,\mu1-30\,\eta^3\,\mu1-2\,\eta\mathrm{t}$$
$$\mu1+18\,\eta\,\eta\mathrm{t}\,\mu1+30\,\eta^2\,\eta\mathrm{t}\,\mu1-50\,\mu1^2-225\,\eta\,\mu1^2-255\,\eta^2$$
$$\mu1^2+20\,\eta\mathrm{t}\,\mu1^2-2\,\eta\,\eta\mathrm{t}\,\mu1^2-\mu2+7\,\eta\,\mu2+60\,\eta^2\,\mu2-16$$
$$\eta\mathrm{t}\,\mu2-30\,\eta\,\eta\mathrm{t}\,\mu2-37\,\mu1\,\mu2-101\,\eta\,\mu1\,\mu2-60\,\eta^2\,\mu1$$
$$\mu2+20\,\eta\mathrm{t}\,\mu1\,\mu2+30\,\eta\,\eta\mathrm{t}\,\mu1\,\mu2+\mathrm{w}^4\,(-1+\eta)^4\,(1+\mu1)$$
$$(\eta-\eta\mathrm{t}+4\,\mu1)\,(-1+\Phi2)+13\,\Phi2+7\,\eta\,\Phi2-10\,\eta^2\,\Phi2+30$$
$$\eta^3\,\Phi2-2\,\eta\mathrm{t}\,\Phi2-20\,\eta\,\eta\mathrm{t}\,\Phi2-30\,\eta^2\,\eta\mathrm{t}\,\Phi2+21\,\mu1\,\Phi2+112$$
$$\eta\,\mu1\,\Phi2+155\,\eta^2\,\mu1\,\Phi2+30\,\eta^3\,\mu1\,\Phi2-10\,\eta\mathrm{t}\,\mu1\,\Phi2-18$$
$$\eta\,\eta\mathrm{t}\,\mu1\,\Phi2-30\,\eta^2\,\eta\mathrm{t}\,\mu1\,\Phi2+2\,\mu1^2\,\Phi2+45\,\eta\,\mu1^2\,\Phi2+75$$
$$\eta^2\,\mu1^2\,\Phi2+4\,\eta\mathrm{t}\,\mu1^2\,\Phi2+2\,\eta\,\eta\mathrm{t}\,\mu1^2\,\Phi2+19\,\mu2\,\Phi2+47\,\eta$$
$$\mu2\,\Phi2-2\,\eta\mathrm{t}\,\mu2\,\Phi2+\mu1\,\mu2\,\Phi2-7\,\eta\,\mu1\,\mu2\,\Phi2-60\,\eta^2\,\mu1$$
$$\mu2\,\Phi2+16\,\eta\mathrm{t}\,\mu1\,\mu2\,\Phi2+30\,\eta\,\eta\mathrm{t}\,\mu1\,\mu2\,\Phi2-\mathrm{w}^3\,(-1+\eta)^3$$
$$\Big(2+7\,\eta\mathrm{t}-45\,\mu1+7\,\eta\mathrm{t}\,\mu1-59\,\mu1^2+14\,\mu2-12\,\eta\mathrm{t}\,\mu2-58\,\mu1\,\mu2+$$
$$12\,\eta\mathrm{t}\,\mu1\,\mu2+10\,\eta^2\,(1+\mu1)\times(-1+\Phi2)+10\,\Phi2-7\,\eta\mathrm{t}\,\Phi2+$$
$$39\,\mu1\,\Phi2-7\,\eta\mathrm{t}\,\mu1\,\Phi2+23\,\mu1^2\,\Phi2+22\,\mu2\,\Phi2-14\,\mu1\,\mu2\,\Phi2+$$
$$12\,\eta\mathrm{t}\,\mu1\,\mu2\,\Phi2+\eta\,\Big(-7+12\,\mu2+47\,\mu1\,(-1+\Phi2)+40\,\mu1^2\,(-1+\Phi2)-$$
$$10\,\eta\mathrm{t}\,(1+\mu1)\times(-1+\Phi2)+7\,\Phi2-12\,\mu1\,\mu2\,(1+\Phi2)\Big)+\mathrm{w}^2\,(-1+\eta)^2$$
$$\Big(9-113\,\mu1-182\,\mu1^2+37\,\mu2-167\,\mu1\,\mu2+15\,\eta^3\,(1+\mu1)\times(-1+\Phi2)+$$
$$33\,\Phi2+101\,\mu1\,\Phi2+38\,\mu1^2\,\Phi2+65\,\mu2\,\Phi2-37\,\mu1\,\mu2\,\Phi2-$$

$$
\begin{aligned}
&5\,\eta^2\,\big(8-6\,\mu2-12\,\mu1^2\,(-1+\Phi2)+3\,\eta t\,(1+\mu1)\times(-1+\Phi2)-\\
&\quad 8\,\Phi2+\mu1\,(20+6\,\mu2-20\,\Phi2+6\,\mu2\,\Phi2)\big)+\eta t\,\big(-15\times(-1+\Phi2)+\\
&\quad 4\,\mu1^2\,(5+\Phi2)-2\,\mu2\,(20+\Phi2)+\mu1\,(11-23\,\Phi2+\mu2\,(44+40\,\Phi2))\big)+\\
&\eta\,\big(-10+77\,\mu2+40\,\Phi2+55\,\mu2\,\Phi2+5\,\mu1^2\,(-61+25\,\Phi2)-\\
&\quad \mu1\,(195+187\,\mu2-225\,\Phi2+77\,\mu2\,\Phi2)+\\
&\quad 10\,\eta t\,(4-3\,\mu2-4\,\Phi2+\mu1\,(4-4\,\Phi2+3\,\mu2\,(1+\Phi2)))\big)\big)-w\\
&(-1+\eta)\times\big(16-101\,\mu1-177\,\mu1^2+22\,\mu2-146\,\mu1\,\mu2+45\,\eta^3\\
&\quad (1+\mu1)\times(-1+\Phi2)+32\,\Phi2+83\,\mu1\,\Phi2+21\,\mu1^2\,\Phi2+62\,\mu2\,\Phi2-\\
&\quad 22\,\mu1\,\mu2\,\Phi2-5\,\eta^2\,\big(9\,\eta t\,(1+\mu1)\times(-1+\Phi2)-9\,\mu1^2\,(-7+3\,\Phi2)-\\
&\quad 2\times(-5+9\,\mu2+5\,\Phi2)+\mu1\,(37-55\,\Phi2+18\,\mu2\,(1+\Phi2))\big)+\\
&\quad \eta t\,\big(-11\times(-1+\Phi2)+8\,\mu1^2\,(5+\Phi2)-4\,\mu2\,(11+\Phi2)+\\
&\quad \mu1\,(3-27\,\Phi2+\mu2\,(52+44\,\Phi2))\big)+\\
&\quad \eta\,\big(19+72\,\mu2+41\,\Phi2+102\,\mu2\,\Phi2+10\,\mu1^2\,(-49+13\,\Phi2)-\\
&\quad 3\,\mu1\,(77+92\,\mu2-97\,\Phi2+24\,\mu2\,\Phi2)+2\,\eta t\,\big(\mu1^2\,(-1+\Phi2)-\\
&\quad 5\times(-5+6\,\mu2+5\,\Phi2)+6\,\mu1\,(4-4\,\Phi2+5\,\mu2\,(1+\Phi2))\big)\big)\big)\big)+\\
&(-1+\eta t)\,\theta l\,\big(4+6\,\theta p+50\,\eta\,\theta p+60\,\eta^2\,\theta p-16\,\mu1+16\,\eta\,\mu1+16\,\eta^2\\
&\quad \mu1-22\,\theta p\,\mu1-92\,\eta\,\theta p\,\mu1+20\,\eta^2\,\theta p\,\mu1-140\,\mu1^2-176\,\eta\\
&\quad \mu1^2+16\,\eta^2\,\mu1^2-4\,\theta p\,\mu1^2-262\,\eta\,\theta p\,\mu1^2-400\,\eta^2\,\theta p\,\mu1^2+19\\
&\quad \mu2-26\,\theta p\,\mu2-20\,\eta\,\theta p\,\mu2+50\,\eta^2\,\theta p\,\mu2-29\,\mu1\,\mu2+22\,\theta p\\
&\quad \mu1\,\mu2-44\,\eta\,\theta p\,\mu1\,\mu2-70\,\eta^2\,\theta p\,\mu1\,\mu2+\theta p\,\Phi1-16\,\theta p\,\mu1\\
&\quad \Phi1-16\,\eta\,\theta p\,\mu1\,\Phi1-5\,\eta^2\,\theta p\,\mu1\,\Phi1-41\,\theta p\,\mu1^2\,\Phi1-76\,\eta\,\theta p\,\mu1^2\\
&\quad \Phi1-5\,\eta^2\,\theta p\,\mu1^2\,\Phi1-5\,\theta p\,\mu2\,\Phi1-5\,\theta p\,\mu1\,\mu2\,\Phi1+20\,\Phi2+5\\
&\quad \theta p\,\Phi2+10\,\eta\,\theta p\,\Phi2-60\,\eta^2\,\theta p\,\Phi2+52\,\mu1\,\Phi2+80\,\eta\,\mu1\,\Phi2-16\\
&\quad \eta^2\,\mu1\,\Phi2+6\,\theta p\,\mu1\,\Phi2+86\,\eta\,\theta p\,\mu1\,\Phi2+155\,\eta^2\,\theta p\,\mu1\,\Phi2-28\\
&\quad \mu1^2\,\Phi2-16\,\eta\,\mu1^2\,\Phi2-16\,\eta^2\,\mu1^2\,\Phi2+37\,\theta p\,\mu1^2\,\Phi2+76\,\eta\,\theta p\\
&\quad \mu1^2\,\Phi2+35\,\eta^2\,\theta p\,\mu1^2\,\Phi2+5\,\mu2\,\Phi2+19\,\theta p\,\mu2\,\Phi2+92\,\eta\,\theta p\\
&\quad \mu2\,\Phi2+10\,\eta^2\,\theta p\,\mu2\,\Phi2-19\,\mu1\,\mu2\,\Phi2+19\,\theta p\,\mu1\,\mu2\,\Phi2-40\,\eta\\
&\quad \theta p\,\mu1\,\mu2\,\Phi2-50\,\eta^2\,\theta p\,\mu1\,\mu2\,\Phi2+5\,\theta p\,\Phi1\,\Phi2+22\,\theta p\,\mu1\,\Phi1\\
&\quad \Phi2+46\,\eta\,\theta p\,\mu1\,\Phi1\,\Phi2+5\,\eta^2\,\theta p\,\mu1\,\Phi1\,\Phi2+5\,\theta p\,\mu1^2\,\Phi1\,\Phi2+16\\
&\quad \eta\,\theta p\,\mu1^2\,\Phi1\,\Phi2+5\,\eta^2\,\theta p\,\mu1^2\,\Phi1\,\Phi2+5\,\theta p\,\mu2\,\Phi1\,\Phi2+5\,\theta p\\
&\quad \mu1\,\mu2\,\Phi1\,\Phi2-5\,\theta p\,\Phi2^2-14\,\theta p\,\mu1\,\Phi2^2-24\,\eta\,\theta p\,\mu1\,\Phi2^2+5\\
&\quad \eta^2\,\theta p\,\mu1\,\Phi2^2+3\,\theta p\,\mu1^2\,\Phi2^2+6\,\eta\,\theta p\,\mu1^2\,\Phi2^2+5\,\eta^2\,\theta p\,\mu1^2\\
&\quad \Phi2^2-5\,\theta p\,\mu2\,\Phi2^2-17\,\theta p\,\mu1\,\mu2\,\Phi2^2-60\,\eta\,\theta p\,\mu1\,\mu2\,\Phi2^2+w^3\\
&\quad (-1+\eta)^3\,\big(-\mu2\,(19+5\,\theta p\,(\Phi1-\Phi2)\,(-1+\Phi2)+5\,\Phi2)+\\
&\quad 4\,\mu1^2\,(6\,\theta p\,(\Phi1-\Phi2)+7\times(5+\Phi2))+(1+5\,\Phi2)\times(-4+\theta p\,(-\Phi1+\Phi2))+\\
&\quad \mu1\,(16-11\,\theta p\,(\Phi1-\Phi2)\,(-1+\Phi2)-52\,\Phi2+\\
&\quad \mu2\,(29-5\,\theta p\,(\Phi1-\Phi2)\,(-1+\Phi2)+19\,\Phi2))\big)+w^2\,(-1+\eta)^2\\
&\quad \big(12-48\,\mu1+16\,\eta\,\mu1-420\,\mu1^2-176\,\eta\,\mu1^2+57\,\mu2-87\,\mu1\,\mu2+\\
&\quad 60\,\Phi2+156\,\mu1\,\Phi2+80\,\eta\,\mu1\,\Phi2-84\,\mu1^2\,\Phi2-16\,\eta\,\mu1^2\,\Phi2+15\,\mu2\,\Phi2-\\
&\quad 57\,\mu1\,\mu2\,\Phi2+\theta p\,\big(\mu1^2\,\big(-56+89\,\Phi2+3\,\Phi2^2+\Phi1\,(-89+5\,\Phi2)\big)+\\
&\quad \mu1\,\big(-26-38\,\Phi1+56\,\Phi2+44\,\Phi1\,\Phi2-36\,\Phi2^2+\\
&\quad 3\,\mu2\,\big(-2+5\,\Phi1\,(-1+\Phi2)+3\,\Phi2-9\,\Phi2^2\big)\big)+3\times\big(2+\Phi1+\Phi2+\\
&\quad 5\,\Phi1\,\Phi2-5\,\Phi2^2+\mu2\,\big(-2+5\,\Phi1\,(-1+\Phi2)+11\,\Phi2-5\,\Phi2^2\big)\big)+\\
&\quad 5\,\eta\,\big(\mu1^2\,\big(-52+3\,\Phi1\,(-5+\Phi2)+15\,\Phi2+\Phi2^2\big)+
\end{aligned}
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                2 × (1 + 5 Φ2 + μ2 (7 + 11 Φ2)) - μ1 (26 + 3 Φ1 - 25 Φ2 -
                    9 Φ1 Φ2 + 5 Φ2^2 + 2 μ2 (17 + 13 Φ2 + 6 Φ2^2))))) - w
        (-1 + η) × (-4 μ1^2 (4 η^2 (-1 + Φ2) + 21 × (5 + Φ2) + 8 η (11 + Φ2)) +
          3 × (4 + 20 Φ2 + μ2 (19 + 5 Φ2)) + μ1
           (-48 - 16 η^2 (-1 + Φ2) + 156 Φ2 + 32 η (1 + 5 Φ2) - 3 μ2 (29 + 19 Φ2)) +
          θp (20 - 32 μ2 + 3 Φ1 - 15 μ2 Φ1 + Φ2 + 47 μ2 Φ2 + 15 Φ1 Φ2 + 15 μ2 Φ1 Φ2 -
              15 Φ2^2 - 15 μ2 Φ2^2 + 2 μ1^2 (-30 - 53 Φ1 + 51 Φ2 + 5 Φ1 Φ2 + 3 Φ2^2) +
              μ1 (-40 + μ2 (-16 + 15 Φ1 - 39 Φ2) × (-1 + Φ2) +
                  43 Φ2 - 39 Φ2^2 + Φ1 (-43 + 55 Φ2)) +
              5 η^2 (2 μ2 (5 + Φ2) + μ1^2 (-80 + Φ1 (-1 + Φ2) + 7 Φ2 + Φ2^2) +
                  μ1 (-8 + Φ1 (-1 + Φ2) + 43 Φ2 + Φ2^2 - 2 μ2 (7 + 5 Φ2))) +
              η (60 × (1 + Φ2) + μ2 (50 + 202 Φ2) + μ1^2 (-522 + 151 Φ2 +
                      11 Φ2^2 + Φ1 (-151 + 31 Φ2)) - μ1 (222 + 31 Φ1 - 211 Φ2 -
                      91 Φ1 Φ2 + 49 Φ2^2 + 2 μ2 (107 + 85 Φ2 + 60 Φ2^2)))))))) +
x^2 (-1 + η)^2 ((-1 + η) θp (12 η + 60 η^2 + 76 η^3 - 20 η^4 - 60 η^5 - 6 ηt - 12
        η ηt + 24 η^2 ηt + 80 η^3 ηt + 60 η^4 ηt - 120 η μ1 - 396 η^2
        μ1 - 344 η^3 μ1 - 170 η^4 μ1 - 60 η^5 μ1 + 44 ηt μ1 + 28 η
        ηt μ1 - 24 η^2 ηt μ1 + 56 η^3 ηt μ1 + 60 η^4 ηt μ1 - 132 η
        μ1^2 - 600 η^2 μ1^2 - 900 η^3 μ1^2 - 510 η^4 μ1^2 + 98 ηt μ1^2 + 424
        η ηt μ1^2 + 240 η^2 ηt μ1^2 - 24 η^3 ηt μ1^2 - 56 η μ2 - 12 η^2
        μ2 + 204 η^3 μ2 + 240 η^4 μ2 - 38 ηt μ2 - 117 η ηt μ2 - 192
        η^2 ηt μ2 - 120 η^3 ηt μ2 - 8 η μ1 μ2 - 444 η^2 μ1 μ2 - 612 η^3
        μ1 μ2 - 240 η^4 μ1 μ2 + 58 ηt μ1 μ2 + 171 η ηt μ1 μ2 + 240
        η^2 ηt μ1 μ2 + 120 η^3 ηt μ1 μ2 + 60 η Φ2 + 156 η^2 Φ2 + 44
        η^3 Φ2 + 20 η^4 Φ2 + 60 η^5 Φ2 - 30 ηt Φ2 - 60 η ηt Φ2 - 24
        η^2 ηt Φ2 - 80 η^3 ηt Φ2 - 60 η^4 ηt Φ2 + 48 η μ1 Φ2 + 252
        η^2 μ1 Φ2 + 464 η^3 μ1 Φ2 + 350 η^4 μ1 Φ2 + 60 η^5 μ1 Φ2 - 32
        ηt μ1 Φ2 - 148 η ηt μ1 Φ2 - 120 η^2 ηt μ1 Φ2 - 56 η^3 ηt
        μ1 Φ2 - 60 η^4 ηt μ1 Φ2 - 12 η μ1^2 Φ2 + 24 η^2 μ1^2 Φ2 + 180
        η^3 μ1^2 Φ2 + 150 η^4 μ1^2 Φ2 + 22 ηt μ1^2 Φ2 + 104 η ηt μ1^2
        Φ2 + 48 η^2 ηt μ1^2 Φ2 + 24 η^3 ηt μ1^2 Φ2 + 32 η μ2 Φ2 + 228
        η^2 μ2 Φ2 + 204 η^3 μ2 Φ2 - 10 ηt μ2 Φ2 - 27 η ηt μ2 Φ2 - 24
        η^2 ηt μ2 Φ2 + 56 η μ1 μ2 Φ2 + 12 η^2 μ1 μ2 Φ2 - 204 η^3 μ1
        μ2 Φ2 - 240 η^4 μ1 μ2 Φ2 + 38 ηt μ1 μ2 Φ2 + 117 η ηt μ1 μ2
        Φ2 + 192 η^2 ηt μ1 μ2 Φ2 + 120 η^3 ηt μ1 μ2 Φ2 + w^4 (-1 + η)^4
        (2 - 10 μ2 - 17 ηt μ2 + 12 η^3 (1 + μ1) × (-1 + Φ2) + 10 Φ2 - 12 ηt Φ2 +
          22 μ2 Φ2 + 5 ηt μ2 Φ2 + μ1^2 (6 × (-5 + Φ2) + ηt (82 + 38 Φ2)) + μ1
           (-28 + 16 Φ2 + 2 μ2 (-17 + 5 Φ2) + ηt (-14 + 7 μ2 - 22 Φ2 + 17 μ2 Φ2)) -
          12 η^2 (1 - 3 μ2 - 4 μ1^2 (-1 + Φ2) + ηt (1 + μ1) × (-1 + Φ2) -
              Φ2 + μ1 (5 - 5 Φ2 + 3 μ2 (1 + Φ2))) +
          2 η (2 + 27 μ2 + 16 Φ2 + 33 μ2 Φ2 + 3 μ1^2 (-19 + 7 Φ2) +
              6 ηt (1 + μ1 - 3 μ2 - Φ2 - μ1 Φ2 + 3 μ1 μ2 (1 + Φ2)) -
              μ1 (55 - 37 Φ2 + 3 μ2 (31 + 9 Φ2)))) - w^3 (-1 + η)^3
        (40 η^4 (1 + μ1) × (-1 + Φ2) - 4 η^3 (-61 μ1 (-1 + Φ2) - 40 μ1^2
                (-1 + Φ2) + 10 ηt (1 + μ1) × (-1 + Φ2) + 36 μ1 μ2 (1 + Φ2) -
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        3 × (-7 + 12 μ2 + 7 Φ2)) + 2 × (4 + 5 μ1^2 (-13 + Φ2) + 20 Φ2 +
        6 μ2 (-1 + 5 Φ2) + μ1 (-49 + 6 μ2 (-9 + Φ2) + 31 Φ2)) +
      3 η (10 + 68 μ2 + 62 Φ2 + 112 μ2 Φ2 + 8 μ1^2 (-29 + 5 Φ2) + 4 ηt μ1^2
          (35 + 9 Φ2) - 3 ηt (-4 + 12 Φ2 + μ2 (29 + 3 Φ2)) - 2 μ1 (87 - 63 Φ2 +
            2 μ2 (73 + 17 Φ2)) + ηt μ1 (24 - 64 Φ2 + 3 μ2 (35 + 29 Φ2))) +
      ηt (-6 + μ2 (-97 + Φ2) - 66 Φ2 + 16 μ1^2 (25 + 8 Φ2) +
        μ1 (10 - 130 Φ2 + μ2 (95 + 97 Φ2))) + 12 η^2 (-2 + 29 μ2 + 14 Φ2 +
        22 μ2 Φ2 + μ1^2 (-59 + 23 Φ2) - μ1 (49 + 73 μ2 - 43 Φ2 + 29 μ2 Φ2) +
        ηt (7 - 12 μ2 - 7 Φ2 + μ1 (7 - 7 Φ2 + 12 μ2 (1 + Φ2)))) - w
    (-1 + η) × (90 η^5 (1 + μ1) × (-1 + Φ2) - 4 × (1 + μ1) ×
       (-1 - 3 μ2 (-1 + Φ2) - 5 Φ2 + μ1 (11 + Φ2)) -
      10 η^4 (9 ηt (1 + μ1) × (-1 + Φ2) - 9 μ1^2 (-7 + 3 Φ2) -
        4 × (-5 + 9 μ2 + 5 Φ2) + μ1 (47 - 65 Φ2 + 36 μ2 (1 + Φ2))) +
      4 η^3 (-3 + 176 μ2 + 63 Φ2 + 106 μ2 Φ2 + 10 μ1^2 (-49 + 13 Φ2) +
        ηt (-44 μ1 (-1 + Φ2) + 6 μ1^2 (-1 + Φ2) + 60 μ1 μ2 (1 + Φ2) - 10 ×
            (-5 + 6 μ2 + 5 Φ2)) - μ1 (253 - 313 Φ2 + 4 μ2 (97 + 44 Φ2))) +
      ηt (48 μ1^2 (9 + 2 Φ2) - 20 × (1 + 5 Φ2) - μ2 (139 + 29 Φ2) +
        μ1 (124 - 148 Φ2 + μ2 (197 + 139 Φ2))) +
      12 η^2 (14 + 34 μ2 + 34 Φ2 + 62 μ2 Φ2 + 3 μ1^2 (-59 + 7 Φ2) -
        μ1 (103 - 85 Φ2 + 2 μ2 (79 + 17 Φ2)) + ηt (-11 × (-1 + Φ2) + 8 μ1^2
            (5 + Φ2) - 4 μ2 (11 + Φ2) + μ1 (3 - 27 Φ2 + μ2 (52 + 44 Φ2)))) +
      η (4 × (18 - 17 μ2 + 3 μ1^2 (-61 + Φ2) + 54 Φ2 + 65 μ2 Φ2 +
            μ1 (-129 - 113 μ2 + 75 Φ2 + 17 μ2 Φ2)) +
        ηt (16 μ1^2 (79 + 20 Φ2) - 3 × (4 + 68 Φ2 + 3 μ2 (47 + 9 Φ2)) +
            μ1 (100 - 460 Φ2 + 9 μ2 (65 + 47 Φ2)))) + w^2
    (-1 + η)^2 (-2 × (-7 + 72 μ1^2 + μ1 (53 + μ2 (43 - 7 Φ2) - 29 Φ2) +
        μ2 (7 - 25 Φ2) - 23 Φ2) + 30 η^5 (1 + μ1) × (-1 + Φ2) +
      ηt (-μ2 (181 + 23 Φ2) - 4 × (5 + 31 Φ2) + 4 μ1^2 (163 + 41 Φ2) +
        μ1 (104 - 224 Φ2 + μ2 (227 + 181 Φ2))) -
      10 η^4 (3 ηt (1 + μ1) × (-1 + Φ2) - 4 × (-4 + 3 μ2 + 3 μ1^2
            (-1 + Φ2) + 4 Φ2 - μ1 (7 - 7 Φ2 + 3 μ2 (1 + Φ2)))) +
      4 η^3 (-40 + 161 μ2 + 70 Φ2 + 55 μ2 Φ2 + 5 μ1^2 (-61 + 25 Φ2) -
        μ1 (225 + 271 μ2 - 255 Φ2 + 161 μ2 Φ2) +
        10 ηt (4 - 3 μ2 - 4 Φ2 + μ1 (4 - 4 Φ2 + 3 μ2 (1 + Φ2)))) +
      12 η^2 (4 + 61 μ2 + 38 Φ2 + 65 μ2 Φ2 + 2 μ1^2 (-91 + 19 Φ2) -
        μ1 (118 - 106 Φ2 + μ2 (191 + 61 Φ2)) + ηt (-15 × (-1 + Φ2) + 4 μ1^2
            (5 + Φ2) - 2 μ2 (20 + Φ2) + μ1 (11 - 23 Φ2 + μ2 (44 + 40 Φ2)))) +
      η (86 + 310 Φ2 + 6 μ1^2 (-197 + 17 Φ2) + 6 μ2 (23 + 83 Φ2) -
        2 μ1 (404 - 278 Φ2 + μ2 (567 + 69 Φ2)) +
        3 ηt (8 - 80 Φ2 + 12 μ1^2 (35 + 9 Φ2) - 3 μ2 (59 + 9 Φ2) +
            μ1 (44 - 164 Φ2 + 3 μ2 (77 + 59 Φ2))))) +
  (-1 + ηt) θl (-2 - 12 η - 12 η^2 + 2 θp + 6 η θp - 36 η^2 θp - 100 η^3
    θp - 60 η^4 θp + 20 μ1 + 136 η μ1 + 104 η^2 μ1 - 16 η^3 μ1 - 16
```

$$
\begin{aligned}
&\eta^4 \mu1 - 20\, \theta p\, \mu1 - 56\, \eta\, \theta p\, \mu1 + 126\, \eta^2\, \theta p\, \mu1 + 192\, \eta^3\, \theta p \\
&\mu1 - 10\, \eta^4\, \theta p\, \mu1 + 22\, \mu1^2 + 148\, \eta\, \mu1^2 + 380\, \eta^2\, \mu1^2 + 176 \\
&\eta^3\, \mu1^2 - 16\, \eta^4\, \mu1^2 - 22\, \theta p\, \mu1^2 - 134\, \eta\, \theta p\, \mu1^2 + 18\, \eta^2\, \theta p \\
&\mu1^2 + 532\, \eta^3\, \theta p\, \mu1^2 + 410\, \eta^4\, \theta p\, \mu1^2 - 19\, \mu2 - 76\, \eta\, \mu2 - 57 \\
&\eta^2\, \mu2 + 14\, \theta p\, \mu2 + 112\, \eta\, \theta p\, \mu2 + 186\, \eta^2\, \theta p\, \mu2 - 100\, \eta^4\, \theta p \\
&\mu2 + 29\, \mu1\, \mu2 + 116\, \eta\, \mu1\, \mu2 + 87\, \eta^2\, \mu1\, \mu2 - 34\, \theta p\, \mu1\, \mu2 - 200 \\
&\eta\, \theta p\, \mu1\, \mu2 - 174\, \eta^2\, \theta p\, \mu1\, \mu2 + 144\, \eta^3\, \theta p\, \mu1\, \mu2 + 140\, \eta^4\, \theta p \\
&\mu1\, \mu2 - \theta p\, \Phi1 - 6\, \eta\, \theta p\, \Phi1 - 6\, \eta^2\, \theta p\, \Phi1 + 10\, \theta p\, \mu1\, \Phi1 + 68 \\
&\eta\, \theta p\, \mu1\, \Phi1 + 93\, \eta^2\, \theta p\, \mu1\, \Phi1 + 36\, \eta^3\, \theta p\, \mu1\, \Phi1 + 10\, \eta^4\, \theta p \\
&\mu1\, \Phi1 + 11\, \theta p\, \mu1^2\, \Phi1 + 110\, \eta\, \theta p\, \mu1^2\, \Phi1 + 243\, \eta^2\, \theta p\, \mu1^2 \\
&\Phi1 + 156\, \eta^3\, \theta p\, \mu1^2\, \Phi1 + 10\, \eta^4\, \theta p\, \mu1^2\, \Phi1 + 5\, \theta p\, \mu2\, \Phi1 + 30\, \eta \\
&\theta p\, \mu2\, \Phi1 + 30\, \eta^2\, \theta p\, \mu2\, \Phi1 + 5\, \theta p\, \mu1\, \mu2\, \Phi1 + 30\, \eta\, \theta p\, \mu1\, \mu2 \\
&\Phi1 + 30\, \eta^2\, \theta p\, \mu1\, \mu2\, \Phi1 - 10\, \Phi2 - 60\, \eta\, \Phi2 - 60\, \eta^2\, \Phi2 + 11\, \theta p \\
&\Phi2 + 36\, \eta\, \theta p\, \Phi2 - 30\, \eta^2\, \theta p\, \Phi2 - 20\, \eta^3\, \theta p\, \Phi2 + 60\, \eta^4\, \theta p\, \Phi2 - 8 \\
&\mu1\, \Phi2 - 64\, \eta\, \mu1\, \Phi2 - 164\, \eta^2\, \mu1\, \Phi2 - 80\, \eta^3\, \mu1\, \Phi2 + 16\, \eta^4\, \mu1 \\
&\Phi2 - 2\, \theta p\, \mu1\, \Phi2 - 2\, \eta\, \theta p\, \mu1\, \Phi2 - 33\, \eta^2\, \theta p\, \mu1\, \Phi2 - 176\, \eta^3\, \theta p \\
&\mu1\, \Phi2 - 160\, \eta^4\, \theta p\, \mu1\, \Phi2 + 2\, \mu1^2\, \Phi2 - 4\, \eta\, \mu1^2\, \Phi2 + 28\, \eta^2\, \mu1^2 \\
&\Phi2 + 16\, \eta^3\, \mu1^2\, \Phi2 + 16\, \eta^4\, \mu1^2\, \Phi2 - 13\, \theta p\, \mu1^2\, \Phi2 - 110\, \eta\, \theta p \\
&\mu1^2\, \Phi2 - 219\, \eta^2\, \theta p\, \mu1^2\, \Phi2 - 156\, \eta^3\, \theta p\, \mu1^2\, \Phi2 - 40\, \eta^4\, \theta p\, \mu1^2 \\
&\Phi2 - 5\, \mu2\, \Phi2 - 20\, \eta\, \mu2\, \Phi2 - 15\, \eta^2\, \mu2\, \Phi2 + 17\, \theta p\, \mu2\, \Phi2 + 50 \\
&\eta\, \theta p\, \mu2\, \Phi2 - 108\, \eta^2\, \theta p\, \mu2\, \Phi2 - 192\, \eta^3\, \theta p\, \mu2\, \Phi2 - 20\, \eta^4\, \theta p \\
&\mu2\, \Phi2 + 19\, \mu1\, \mu2\, \Phi2 + 76\, \eta\, \mu1\, \mu2\, \Phi2 + 57\, \eta^2\, \mu1\, \mu2\, \Phi2 - 31 \\
&\theta p\, \mu1\, \mu2\, \Phi2 - 178\, \eta\, \theta p\, \mu1\, \mu2\, \Phi2 - 144\, \eta^2\, \theta p\, \mu1\, \mu2\, \Phi2 + 120 \\
&\eta^3\, \theta p\, \mu1\, \mu2\, \Phi2 + 100\, \eta^4\, \theta p\, \mu1\, \mu2\, \Phi2 - 5\, \theta p\, \Phi1\, \Phi2 - 30\, \eta \\
&\theta p\, \Phi1\, \Phi2 - 30\, \eta^2\, \theta p\, \Phi1\, \Phi2 - 4\, \theta p\, \mu1\, \Phi1\, \Phi2 - 50\, \eta\, \theta p\, \mu1\, \Phi1 \\
&\Phi2 - 129\, \eta^2\, \theta p\, \mu1\, \Phi1\, \Phi2 - 96\, \eta^3\, \theta p\, \mu1\, \Phi1\, \Phi2 - 10\, \eta^4\, \theta p \\
&\mu1\, \Phi1\, \Phi2 + \theta p\, \mu1^2\, \Phi1\, \Phi2 - 2\, \eta\, \theta p\, \mu1^2\, \Phi1\, \Phi2 - 27\, \eta^2\, \theta p\, \mu1^2 \\
&\Phi1\, \Phi2 - 36\, \eta^3\, \theta p\, \mu1^2\, \Phi1\, \Phi2 - 10\, \eta^4\, \theta p\, \mu1^2\, \Phi1\, \Phi2 - 5\, \theta p\, \mu2 \\
&\Phi1\, \Phi2 - 30\, \eta\, \theta p\, \mu2\, \Phi1\, \Phi2 - 30\, \eta^2\, \theta p\, \mu2\, \Phi1\, \Phi2 - 5\, \theta p\, \mu1\, \mu2 \\
&\Phi1\, \Phi2 - 30\, \eta\, \theta p\, \mu1\, \mu2\, \Phi1\, \Phi2 - 30\, \eta^2\, \theta p\, \mu1\, \mu2\, \Phi1\, \Phi2 + 5\, \theta p \\
&\Phi2^2 + 30\, \eta\, \theta p\, \Phi2^2 + 30\, \eta^2\, \theta p\, \Phi2^2 + 4\, \theta p\, \mu1\, \Phi2^2 + 40\, \eta\, \theta p\, \mu1 \\
&\Phi2^2 + 87\, \eta^2\, \theta p\, \mu1\, \Phi2^2 + 44\, \eta^3\, \theta p\, \mu1\, \Phi2^2 - 10\, \eta^4\, \theta p\, \mu1\, \Phi2^2 - \theta p \\
&\mu1^2\, \Phi2^2 - 8\, \eta\, \theta p\, \mu1^2\, \Phi2^2 - 15\, \eta^2\, \theta p\, \mu1^2\, \Phi2^2 - 16\, \eta^3\, \theta p\, \mu1^2 \\
&\Phi2^2 - 10\, \eta^4\, \theta p\, \mu1^2\, \Phi2^2 + 5\, \theta p\, \mu2\, \Phi2^2 + 30\, \eta\, \theta p\, \mu2\, \Phi2^2 + 30 \\
&\eta^2\, \theta p\, \mu2\, \Phi2^2 - 7\, \theta p\, \mu1\, \mu2\, \Phi2^2 - 6\, \eta\, \theta p\, \mu1\, \mu2\, \Phi2^2 + 102 \\
&\eta^2\, \theta p\, \mu1\, \mu2\, \Phi2^2 + 120\, \eta^3\, \theta p\, \mu1\, \mu2\, \Phi2^2 + 2\, w^4\, (-1 + \eta)^4 \\
&\Big(-1 - 5\, \mu2 + 5\, \mu1\, (-2 + \mu2) \times (-1 + \Phi2) - 5\, \Phi2 + 5\, \mu2\, \Phi2 + \\
&\quad \mu1^2\, (23 + \Phi2) + \eta\, \Big(-2 - 5\, \mu2 + \mu1\, (2 + 5\, \mu2\, (-1 + \Phi2) - 20\, \Phi2) - \\
&\qquad 10\, \Phi2 + 5\, \mu2\, \Phi2 + 4\, \mu1^2\, (16 + 5\, \Phi2)\Big)\Big) - w^3\, (-1 + \eta)^3 \\
&\Big(-8 + 80\, \mu1 + 160\, \mu1^2 - 49\, \mu2 - \mu1\, \mu2 - \theta p\, \Phi1 + 11\, \theta p\, \mu1\, \Phi1 + \\
&\quad 24\, \theta p\, \mu1^2\, \Phi1 + 5\, \theta p\, \mu2\, \Phi1 + 5\, \theta p\, \mu1\, \mu2\, \Phi1 - 40\, \Phi2 + \theta p\, \Phi2 - 68\, \mu1\, \Phi2 - \\
&\quad 11\, \theta p\, \mu1\, \Phi2 + 8\, \mu1^2\, \Phi2 - 24\, \theta p\, \mu1^2\, \Phi2 + 25\, \mu2\, \Phi2 - 5\, \theta p\, \mu2\, \Phi2 + \\
&\quad 49\, \mu1\, \mu2\, \Phi2 - 5\, \theta p\, \mu1\, \mu2\, \Phi2 - 5\, \theta p\, \Phi1\, \Phi2 - 11\, \theta p\, \mu1\, \Phi1\, \Phi2 - \\
&\quad 5\, \theta p\, \mu2\, \Phi1\, \Phi2 - 5\, \theta p\, \mu1\, \mu2\, \Phi1\, \Phi2 + 5\, \theta p\, \Phi2^2 + 11\, \theta p\, \mu1\, \Phi2^2 + 5\, \theta p\, \mu2\, \Phi2^2 + \\
&\quad 5\, \theta p\, \mu1\, \mu2\, \Phi2^2 + 3\, \eta^2\, \Big(4\, \mu1^2\, (31 + 12\, \theta p\, (\Phi1 - \Phi2) + 3\, \Phi2) - \\
&\qquad \mu2\, (19 + 10\, \theta p\, (\Phi1 - \Phi2)\, (-1 + \Phi2) + 5\, \Phi2) + 2 \times (1 + 5\, \Phi2) \times
\end{aligned}
$$

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        (-2 + θp (-Φ1 + Φ2)) + μ1 (32 - 22 θp (Φ1 - Φ2) (-1 + Φ2) -
          52 Φ2 + μ2 (29 - 10 θp (Φ1 - Φ2) (-1 + Φ2) + 19 Φ2))) +
    2 η (μ2 (-53 - 15 θp (Φ1 - Φ2) (-1 + Φ2) + 5 Φ2) + μ1^2
        (326 + 72 θp (Φ1 - Φ2) + 46 Φ2) + 3 × (1 + 5 Φ2) ×
        (-4 + θp (-Φ1 + Φ2)) + μ1 (86 - 33 θp (Φ1 - Φ2) (-1 + Φ2) -
          128 Φ2 + μ2 (43 - 15 θp (Φ1 - Φ2) (-1 + Φ2) + 53 Φ2))) - w^2
  (-1 + η)^2 (-3 × (-4 - 29 μ2 - 20 Φ2 + 5 μ2 Φ2 + 4 μ1^2 (17 + Φ2) +
      μ1 (40 - 28 Φ2 + μ2 (19 + 29 Φ2))) + θp (2 + 3 Φ1 - 17 Φ2 +
      15 Φ1 Φ2 - 15 Φ2^2 + μ2 (-34 + 15 Φ1 (-1 + Φ2) - 11 Φ2 - 15 Φ2^2) +
      μ1^2 (48 + 59 Φ2 + Φ2^2 - Φ1 (59 + Φ2)) + μ1 (26 - 32 Φ1 + 6 Φ2 +
          26 Φ1 Φ2 - 26 Φ2^2 + μ2 (62 + 15 Φ1 (-1 + Φ2) + 61 Φ2 - 3 Φ2^2))) +
    3 η^2 (3 × (4 + 19 μ2 + 20 Φ2 + 5 μ2 Φ2 - 4 μ1^2 (31 + 3 Φ2) -
          μ1 (32 + 29 μ2 - 52 Φ2 + 19 μ2 Φ2)) +
      2 θp (μ1^2 (-56 + 89 Φ2 + 3 Φ2^2 + Φ1 (-89 + 5 Φ2)) +
          μ1 (-26 - 38 Φ1 + 56 Φ2 + 44 Φ1 Φ2 - 36 Φ2^2 + 3 μ2
              (-2 + 5 Φ1 (-1 + Φ2) + 3 Φ2 - 9 Φ2^2)) + 3 × (2 + Φ1 + Φ2 + 5
              Φ1 Φ2 - 5 Φ2^2 + μ2 (-2 + 5 Φ1 (-1 + Φ2) + 11 Φ2 - 5 Φ2^2)))) +
    3 η (16 + 86 μ2 + 80 Φ2 + 10 μ2 Φ2 - 4 μ1^2 (89 + 5 Φ2) -
      2 μ1 (78 - 76 Φ2 + μ2 (53 + 43 Φ2)) +
      θp (μ1^2 (44 + Φ1 (-133 + Φ2) + 133 Φ2 + 3 Φ2^2) + 6 × (1 + Φ1 -
            4 Φ2 + 5 Φ1 Φ2 - 5 Φ2^2 + μ2 (-9 + 5 Φ1 (-1 + Φ2) - 5 Φ2^2)) +
          μ1 (26 - 67 Φ1 + 37 Φ2 + 61 Φ1 Φ2 - 57 Φ2^2 + 6 μ2
              (15 + 5 Φ1 (-1 + Φ2) + 16 Φ2 - 3 Φ2^2)))) + 2 η^3
     (-8 μ1 (-1 - 5 Φ2 + μ1 (11 + Φ2)) + 5 θp (μ1^2 (-52 + 3 Φ1 (-5 + Φ2) +
            15 Φ2 + Φ2^2) + 2 × (1 + 5 Φ2 + μ2 (7 + 11 Φ2)) - μ1 (26 + 3 Φ1 -
            25 Φ2 - 9 Φ1 Φ2 + 5 Φ2^2 + 2 μ2 (17 + 13 Φ2 + 6 Φ2^2))))) +
  w (-1 + η) × (8 - 80 μ1 - 112 μ1^2 + 67 μ2 - 77 μ1 μ2 + 40 Φ2 +
    44 μ1 Φ2 - 8 μ1^2 Φ2 + 5 μ2 Φ2 - 67 μ1 μ2 Φ2 + θp ((-4 + 3 Φ1 - 3 Φ2) ×
        (1 + 5 Φ2) + 3 μ2 (-16 + 5 Φ1 (-1 + Φ2) - 11 Φ2 - 5 Φ2^2) +
      2 μ1^2 (35 + 24 Φ2 + Φ2^2 - Φ1 (23 + Φ2)) + μ1 (42 - 31 Φ1 + Φ2 +
          19 Φ1 Φ2 - 19 Φ2^2 + 3 μ2 (32 + 5 Φ1 (-1 + Φ2) + 29 Φ2 + 3 Φ2^2))) +
    2 η^4 (10 θp μ2 (5 + Φ2) + μ1^2 (8 - 8 Φ2 + 5 θp (-41 + Φ1
              (-1 + Φ2) + 4 Φ2 + Φ2^2)) + μ1 (8 - 8 Φ2 + 5 θp
            (-5 + Φ1 (-1 + Φ2) + 22 Φ2 + Φ2^2 - 2 μ2 (7 + 5 Φ2)))) +
    η^2 (-4 μ1^2 (281 + 25 Φ2) + 9 × (4 + 20 Φ2 + μ2 (19 + 5 Φ2)) -
      μ1 (296 - 476 Φ2 + 9 μ2 (29 + 19 Φ2)) + 3 θp
        (μ1^2 (-118 + 203 Φ2 + 11 Φ2^2 + Φ1 (-211 + 19 Φ2)) + μ1 (-78 - 85
              Φ1 + 85 Φ2 + 109 Φ1 Φ2 - 79 Φ2^2 + μ2 (46 + 30 Φ1 (-1 + Φ2) +
                56 Φ2 - 78 Φ2^2)) + 2 × (20 + 3 Φ1 + Φ2 + 15 Φ1 Φ2 - 15 Φ2^2 +
            μ2 (-37 + 15 Φ1 (-1 + Φ2) + 46 Φ2 - 15 Φ2^2)))) +
    η (40 + 238 μ2 + 200 Φ2 + 50 μ2 Φ2 - 4 μ1^2 (173 + Φ2) -
      2 μ1 (218 + 169 μ2 - 152 Φ2 + 119 μ2 Φ2) +
      θp (μ1^2 (266 + 5 Φ1 (-73 + Φ2) + 365 Φ2 + 17 Φ2^2) +
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                2 × (6 + 9 Φ1 - 51 Φ2 + 45 Φ1 Φ2 - 45 Φ2^2 +
                    μ2 (-137 + 45 Φ1 (-1 + Φ2) - 40 Φ2 - 45 Φ2^2)) +
                μ1 (134 - 203 Φ1 + 47 Φ2 + 167 Φ1 Φ2 - 145 Φ2^2 +
                    2 μ2 (235 + 45 Φ1 (-1 + Φ2) + 218 Φ2 - 9 Φ2^2)))) +
            2 η^3 (-16 μ1 (-1 - 5 Φ2 + μ1 (11 + Φ2)) + θp (60 + 70 μ2 + 60 Φ2 +
                206 μ2 Φ2 + μ1^2 (-526 + 153 Φ2 + 13 Φ2^2 + 3 Φ1 (-51 + 11 Φ2)) -
                μ1 (226 + 33 Φ1 - 213 Φ2 - 93 Φ1 Φ2 + 47 Φ2^2 +
                    2 μ2 (121 + 95 Φ2 + 60 Φ2^2))))))) +
x^5 (-1 + η)^5 (-4 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 (1 - 11 μ1 - η
        (1 + μ1) × (-1 + Φ2) + 5 Φ2 - μ1 Φ2 + w
        (-1 + η) × (-1 - 5 Φ2 + μ1 (11 + Φ2))) +
    θp (10 + 6 η - 40 η^2 + 24 η^3 + 8 ηt + 16 η ηt - 24 η^2 ηt - 10 θl - 24 η
        θl + 10 ηt θl + 24 η ηt θl - 32 μ1 - 12 η μ1 + 20 η^2 μ1 + 24
        η^3 μ1 + 8 ηt μ1 + 16 η ηt μ1 - 24 η^2 ηt μ1 + 18 θl μ1 - 10
        η θl μ1 - 18 ηt θl μ1 + 10 η ηt θl μ1 - 90 μ1^2 - 114 η
        μ1^2 + 204 η^2 μ1^2 + 52 θl μ1^2 + 158 η θl μ1^2 - 52 ηt θl
        μ1^2 - 158 η ηt θl μ1^2 - 6 μ2 + 30 η μ2 - 24 η^2 μ2 - 12 ηt
        μ2 + 12 η ηt μ2 + 6 θl μ2 - 10 η θl μ2 - 6 ηt θl μ2 + 10 η
        ηt θl μ2 - 30 μ1 μ2 + 6 η μ1 μ2 + 24 η^2 μ1 μ2 + 12 ηt μ1
        μ2 - 12 η ηt μ1 μ2 + 6 θl μ1 μ2 + 14 η θl μ1 μ2 - 6 ηt θl
        μ1 μ2 - 14 η ηt θl μ1 μ2 + 3 θl μ1 Φ1 + η θl μ1 Φ1 - 3 ηt
        θl μ1 Φ1 - η ηt θl μ1 Φ1 + 15 θl μ1^2 Φ1 + η θl μ1^2 Φ1 - 15
        ηt θl μ1^2 Φ1 - η ηt θl μ1^2 Φ1 + 4 w^3 (-1 + η)^4 (1 + μ1)
        (η - ηt + 4 μ1) (-1 + Φ2) + 2 Φ2 - 18 η Φ2 + 40 η^2 Φ2 - 24
        η^3 Φ2 - 8 ηt Φ2 - 16 η ηt Φ2 + 24 η^2 ηt Φ2 - 2 θl Φ2 + 24
        η θl Φ2 + 2 ηt θl Φ2 - 24 η ηt θl Φ2 + 44 μ1 Φ2 + 72 η μ1
        Φ2 - 92 η^2 μ1 Φ2 - 24 η^3 μ1 Φ2 - 8 ηt μ1 Φ2 - 16 η ηt μ1
        Φ2 + 24 η^2 ηt μ1 Φ2 - 17 θl μ1 Φ2 - 61 η θl μ1 Φ2 + 17 ηt
        θl μ1 Φ2 + 61 η ηt θl μ1 Φ2 + 18 μ1^2 Φ2 + 42 η μ1^2 Φ2 - 60
        η^2 μ1^2 Φ2 - 15 θl μ1^2 Φ2 - 13 η θl μ1^2 Φ2 + 15 ηt θl μ1^2
        Φ2 + 13 η ηt θl μ1^2 Φ2 + 18 μ2 Φ2 - 18 η μ2 Φ2 - 18 θl μ2
        Φ2 - 2 η θl μ2 Φ2 + 18 ηt θl μ2 Φ2 + 2 η ηt θl μ2 Φ2 + 6 μ1
        μ2 Φ2 - 30 η μ1 μ2 Φ2 + 24 η^2 μ1 μ2 Φ2 + 12 ηt μ1 μ2 Φ2 - 12
        η ηt μ1 μ2 Φ2 + 6 θl μ1 μ2 Φ2 + 10 η θl μ1 μ2 Φ2 - 6 ηt θl
        μ1 μ2 Φ2 - 10 η ηt θl μ1 μ2 Φ2 - 9 θl μ1 Φ1 Φ2 - η θl μ1
        Φ1 Φ2 + 9 ηt θl μ1 Φ1 Φ2 + η ηt θl μ1 Φ1 Φ2 - 3 θl μ1^2 Φ1
        Φ2 - η θl μ1^2 Φ1 Φ2 + 3 ηt θl μ1^2 Φ1 Φ2 + η ηt θl μ1^2 Φ1
        Φ2 + 5 θl μ1 Φ2^2 - η θl μ1 Φ2^2 - 5 ηt θl μ1 Φ2^2 + η ηt θl μ1
        Φ2^2 - θl μ1^2 Φ2^2 - η θl μ1^2 Φ2^2 + ηt θl μ1^2 Φ2^2 + η ηt θl μ1^2
        Φ2^2 + 12 θl μ1 μ2 Φ2^2 - 12 ηt θl μ1 μ2 Φ2^2 - w^2 (-1 + η)^2
        (-2 + 2 θl + 72 μ1 - 26 θl μ1 + 122 μ1^2 - 52 θl μ1^2 - 14 μ2 +
            14 θl μ2 + 58 μ1 μ2 - 34 θl μ1 μ2 - 3 θl μ1 Φ1 - 15 θl μ1^2 Φ1 +
            12 η^3 (1 + μ1) × (-1 + Φ2) - 10 Φ2 + 10 θl Φ2 - 84 μ1 Φ2 + 25 θl μ1 Φ2 -
            50 μ1^2 Φ2 + 15 θl μ1^2 Φ2 - 22 μ2 Φ2 + 22 θl μ2 Φ2 + 14 μ1 μ2 Φ2 -
            26 θl μ1 μ2 Φ2 + 9 θl μ1 Φ1 Φ2 + 3 θl μ1^2 Φ1 Φ2 - 5 θl μ1 Φ2^2 +
            θl μ1^2 Φ2^2 - 12 θl μ1 μ2 Φ2^2 - 4 η^2 (1 - 3 μ2 - 12 μ1^2 (-1 + Φ2) +
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                3 η t (1 + μ1) × (-1 + Φ2) - Φ2 + μ1 (13 + 3 μ2 - 13 Φ2 + 3 μ2 Φ2)) +
            2 η (9 + μ2 + μ1^2 (-37 + Φ2) - 3 Φ2 + 11 μ2 Φ2 + 2 η t (1 + μ1 - 3 μ2 -
                Φ2 - μ1 Φ2 + 3 μ1 μ2 (1 + Φ2)) - μ1 (4 - 10 Φ2 + μ2 (23 + Φ2))) -
            η t (4 × (4 - 3 μ2 - 4 Φ2 + μ1 (4 - 4 Φ2 + 3 μ2 (1 + Φ2))) +
                θl (μ1^2 (-52 + 3 Φ1 (-5 + Φ2) + 15 Φ2 + Φ2^2) +
                    2 × (1 + 5 Φ2 + μ2 (7 + 11 Φ2)) - μ1 (26 + 3 Φ1 - 25 Φ2 - 9 Φ1 Φ2 +
                        5 Φ2^2 + 2 μ2 (17 + 13 Φ2 + 6 Φ2^2)))) + w (-1 + η) ×
        (36 η^3 (1 + μ1) × (-1 + Φ2) - 4 η^2 (-4 - 9 μ2 + 9 η t (1 + μ1) × (-1 +
                Φ2) + 4 Φ2 - 9 μ1^2 (-7 + 3 Φ2) + μ1 (23 - 41 Φ2 + 9 μ2 (1 + Φ2))) +
            η (-8 × (-4 + Φ2) + 2 μ2 (-14 + 20 Φ2 + θl (5 + Φ2)) +
                μ1^2 (-56 × (-1 + Φ2) + θl (-158 + Φ1 (-1 + Φ2) + 13 Φ2 + Φ2^2)) +
                μ1 (40 - 52 μ2 - 88 Φ2 + 28 μ2 Φ2 + θl (-14 + Φ1 (-1 + Φ2) + 85 Φ2 +
                        Φ2^2 - 2 μ2 (7 + 5 Φ2))) - η t (θl μ1^2 (-158 + Φ1 (-1 + Φ2) +
                        13 Φ2 + Φ2^2) + 2 × (8 - 8 Φ2 + μ2 (12 + θl (5 + Φ2))) -
                    μ1 (8 × (2 × (-1 + Φ2) + 3 μ2 (1 + Φ2)) + θl
                            (14 + Φ1 - 85 Φ2 - Φ1 Φ2 - Φ2^2 + 2 μ2 (7 + 5 Φ2)))) -
            2 × (6 - 44 μ1 - 98 μ1^2 + 4 μ2 - 44 μ1 μ2 + 6 Φ2 + 56 μ1 Φ2 +
                26 μ1^2 Φ2 + 20 μ2 Φ2 - 4 μ1 μ2 Φ2 - θl (6 + 4 μ2 + 6 Φ2 +
                    20 μ2 Φ2 + μ1^2 (-52 + 3 Φ1 (-5 + Φ2) + 15 Φ2 + Φ2^2) - μ1
                     (22 + 3 Φ1 - 21 Φ2 - 9 Φ1 Φ2 + 5 Φ2^2 + 4 μ2 (5 + 4 Φ2 + 3 Φ2^2))) +
                η t (2 × (5 - 6 μ2 - 5 Φ2 + μ1 (5 - 5 Φ2 + 6 μ2 (1 + Φ2))) +
                    θl (6 + 4 μ2 + 6 Φ2 + 20 μ2 Φ2 + μ1^2 (-52 + 3 Φ1 (-5 + Φ2) +
                            15 Φ2 + Φ2^2) - μ1 (22 + 3 Φ1 - 21 Φ2 - 9 Φ1 Φ2 +
                            5 Φ2^2 + 4 μ2 (5 + 4 Φ2 + 3 Φ2^2))))))) -
    x (-1 + η) × (4 w^2 (3 - 5 w + 2 w^2) η^9 θp (1 + μ1) × (-1 + Φ2) - 4 w η^8 θp
        (9 × (1 + μ1) × (-1 + Φ2) + w^3 (-7 + μ1 - 9 μ2 - 8 μ1^2 (-1 + Φ2) +
                2 η t (1 + μ1) × (-1 + Φ2) + 7 Φ2 - μ1 Φ2 + 9 μ1 μ2 (1 + Φ2)) + w
            (11 - 15 μ2 - 23 μ1 (-1 + Φ2) - 12 μ1^2 (-1 + Φ2) +
                3 η t (1 + μ1) × (-1 + Φ2) - 11 Φ2 + 15 μ1 μ2 (1 + Φ2)) + w^2
            (6 + 24 μ2 + 20 μ1^2 (-1 + Φ2) - 5 η t (1 + μ1) × (-1 + Φ2) -
                6 Φ2 - 2 μ1 (7 - 7 Φ2 + 12 μ2 (1 + Φ2)))) -
        (1 + w)^3 (5 w θl (1 + μ1) μ2 (-1 + Φ2) - 5 w η t θl (1 + μ1) μ2
            (-1 + Φ2) + η t θp (-2 - 19 μ2 - 10 Φ2 - 5 μ2 Φ2 + 2 μ1^2 (11 + Φ2) +
                2 w (-1 + μ1 (4 + 5 μ2 (-1 + Φ2) - 10 Φ2) + 5 μ2 (-1 + Φ2) -
                    5 Φ2 + μ1^2 (29 + 7 Φ2)) + μ1 (20 - 8 Φ2 + μ2 (29 + 19 Φ2)))) +
        2 η^7 θp (12 × (1 + μ1) × (-1 + Φ2) + 2 w (7 - 45 μ2 + 9 η t (1 + μ1) × (-1 + Φ2) -
                7 Φ2 - 9 μ1^2 (-7 + 3 Φ2) + μ1 (34 - 52 Φ2 + 45 μ2 (1 + Φ2))) + w^2
            (47 + 113 μ2 - 17 Φ2 + 55 μ2 Φ2 + μ1^2 (-233 + 53 Φ2) -
                μ1 (66 + 223 μ2 - 96 Φ2 + 113 μ2 Φ2) +
                η t (22 - 30 μ2 - 22 μ1 (-1 + Φ2) - 22 Φ2 + 30 μ1 μ2 (1 + Φ2))) + w^4
            (-9 - 57 μ2 + μ1^2 (23 - 59 Φ2) + 27 Φ2 + 33 μ2 Φ2 +
                2 η t (-7 - 9 μ2 + 7 μ1 (-1 + Φ2) + 7 Φ2 + 9 μ1 μ2 (1 + Φ2)) +
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        μ1 (14 - 32 Φ2 + μ2 (-9 + 57 Φ2))) - 2 w^3 (18 - 23 μ2 + 6 Φ2 +
        44 μ2 Φ2 - 2 μ1^2 (19 + 17 Φ2) + μ1 (4 - 65 μ2 - 16 Φ2 + 23 μ2 Φ2) +
        6 ηt (-1 - 4 μ2 + Φ2 + μ1 (-1 + Φ2 + 4 μ2 (1 + Φ2))))) -
η (θp (2 w^3 (ηt (10 + μ2 - μ1 μ2 (-97 + Φ2) + 6 μ1 (-8 + Φ2) + 14 Φ2 -
            49 μ2 Φ2 + 2 μ1^2 (-11 + 5 Φ2)) + 2 × (4 + 5 μ1^2 (-13 + Φ2) +
            20 Φ2 + 6 μ2 (-1 + 5 Φ2) + μ1 (-49 + 6 μ2 (-9 + Φ2) + 31 Φ2))) +
        ηt (6 μ1^2 (25 + 3 Φ2) - 10 × (1 + 5 Φ2) - 3 μ2 (19 + 5 Φ2) +
          μ1 (92 - 56 Φ2 + μ2 (87 + 57 Φ2))) -
        2 w^4 (ηt (-5 - 8 μ2 + 4 μ1 (7 + 2 μ2 (-4 + Φ2) - 7 Φ2) - 13 Φ2 +
            20 μ2 Φ2 + 3 μ1^2 (23 + Φ2)) - 2 × (1 - 5 μ2 + 3 μ1^2 (-5 + Φ2) +
            5 Φ2 + 11 μ2 Φ2 + μ1 (-14 - 17 μ2 + 8 Φ2 + 5 μ2 Φ2))) +
        w^2 (-4 × (-7 + 72 μ1^2 + 7 μ2 - 23 Φ2 - 25 μ2 Φ2 + μ1 (53 + 43 μ2 -
              29 Φ2 - 7 μ2 Φ2)) + ηt (-4 - 101 μ2 - 68 Φ2 - 91 μ2 Φ2 +
            μ1^2 (476 + 76 Φ2) + μ1 (64 + 283 μ2 - 196 Φ2 + 101 μ2 Φ2))) +
        4 w (-2 × (1 + μ1) × (-1 + 3 μ2 - 5 Φ2 - 3 μ2 Φ2 + μ1 (11 + Φ2)) +
          ηt (μ1^2 (133 + 17 Φ2) - 6 × (1 + 5 Φ2 + 2 μ2 (3 + Φ2)) +
            μ1 (49 - 52 Φ2 + 12 μ2 (5 + 3 Φ2))))) +
    (-1 + ηt) θl (2 - 20 μ1 - 22 μ1^2 + 19 μ2 - 29 μ1 μ2 + 10 Φ2 +
        8 μ1 Φ2 - 2 μ1^2 Φ2 + 5 μ2 Φ2 - 19 μ1 μ2 Φ2 +
        2 w^4 (1 + μ1) × (1 + 5 μ2 (-1 + Φ2) + 5 Φ2 + μ1 (-17 + 5 Φ2)) -
        2 w^3 (2 μ1^2 (31 + 12 θp (Φ1 - Φ2) - 7 Φ2) -
          μ2 (2 + 5 θp (Φ1 - Φ2) (-1 + Φ2) + 10 Φ2) +
          μ1 (58 - 11 θp (Φ1 - Φ2) (-1 + Φ2) - 5 θp μ2 (Φ1 - Φ2) (-1 + Φ2) -
            34 Φ2 + 2 μ2 (11 + Φ2)) + (1 + 5 Φ2) × (-4 + θp (-Φ1 + Φ2))) -
        2 θp (μ1^2 (-2 + Φ1 - Φ2) × (11 + Φ2) - (-2 + Φ1 - Φ2) × (1 + 5 Φ2) +
          μ2 (14 + 5 Φ1 + 17 Φ2 - 5 Φ1 Φ2 + 5 Φ2^2) - μ1 (2 × (-2 + Φ1 - Φ2) ×
            (-5 + 2 Φ2) + μ2 (34 + 5 Φ1 (-1 + Φ2) + 31 Φ2 + 7 Φ2^2))) +
        w^2 (3 × (4 + 8 μ1^2 (-7 + Φ2) + 20 Φ2 + μ2 (19 + 5 Φ2) - μ1
              (52 - 28 Φ2 + μ2 (29 + 19 Φ2))) - 2 θp (-2 - 3 Φ1 + 17 Φ2 -
            15 Φ1 Φ2 + 15 Φ2^2 + μ2 (34 - 15 Φ1 (-1 + Φ2) + 11 Φ2 + 15 Φ2^2) +
            μ1^2 (-48 - 59 Φ2 - Φ2^2 + Φ1 (59 + Φ2)) -
            μ1 (26 - 32 Φ1 + 6 Φ2 + 26 Φ1 Φ2 - 26 Φ2^2 +
              μ2 (62 + 15 Φ1 (-1 + Φ2) + 61 Φ2 - 3 Φ2^2)))) -
        2 w (-4 + 46 μ1 + 50 μ1^2 - 31 μ2 + 41 μ1 μ2 - 20 Φ2 - 22 μ1 Φ2 - 2 μ1^2
            Φ2 - 5 μ2 Φ2 + 31 μ1 μ2 Φ2 + θp (-((-4 + 3 Φ1 - 3 Φ2) × (1 + 5 Φ2)) +
            3 μ2 (16 + 5 Φ1 + 11 Φ2 - 5 Φ1 Φ2 + 5 Φ2^2) - 2 μ1^2 (35 + 24 Φ2 +
              Φ2^2 - Φ1 (23 + Φ2)) - μ1 (42 - 31 Φ1 + Φ2 + 19 Φ1 Φ2 -
              19 Φ2^2 + 3 μ2 (32 + 5 Φ1 (-1 + Φ2) + 29 Φ2 + 3 Φ2^2))))))) +
η^3 (θp (ηt (-11 μ2 (-1 + Φ2) - μ1 (72 + 11 μ2) × (-1 + Φ2) - 4 ×
            (7 + 11 Φ2) + 4 μ1^2 (61 + 11 Φ2)) + 4 w (8 + 28 Φ2 - 30 μ1 (1 + Φ2) -
          2 μ2 (59 + Φ2) - 2 μ1^2 (-5 + 17 Φ2) + 2 μ1 μ2 (61 + 59 Φ2) +
          ηt μ1^2 (323 + 79 Φ2) - 6 ηt (3 + 5 Φ2 + 3 μ2 (3 + Φ2)) +
          ηt μ1 (-1 - 104 Φ2 + 18 μ2 (5 + 3 Φ2))) -
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        4 × (7 + 11 Φ2 + μ1^2 (-67 + 7 Φ2) + μ2 (17 + 31 Φ2) -
            μ1 (36 - 30 Φ2 + μ2 (79 + 17 Φ2))) -
        4 w^3 (-8 - 203 μ2 + μ1^2 (188 - 44 Φ2) - 40 Φ2 - 112 μ2 Φ2 +
            μ1 (132 - 108 Φ2 + 7 μ2 (61 + 29 Φ2)) +
            ηt (5 μ2 (-1 + Φ2) + 5 μ1 μ2 (-1 + Φ2) - 32 × (1 + 2 Φ2) -
                6 μ1 (1 + 24 Φ2) + 2 μ1^2 (259 + 83 Φ2))) +
        2 w^2 (75 - 7 μ2 + μ1^2 (-613 + Φ2) + 171 Φ2 + 337 μ2 Φ2 +
            μ1 (-418 + 232 Φ2 + μ2 (-667 + 7 Φ2)) +
            ηt (30 - 137 μ2 + 42 Φ2 - 37 μ2 Φ2 + 28 μ1^2 (1 + 2 Φ2) -
                2 μ1 (85 + 8 Φ2) + μ1 μ2 (211 + 137 Φ2))) -
        2 w^4 (9 - 247 μ2 + 21 Φ2 + 55 μ2 Φ2 - μ1^2 (31 + 29 Φ2) +
            μ1 (-22 + 137 μ2 - 8 Φ2 + 247 μ2 Φ2) + 2 ηt (-8 - 15 μ2 - 22 Φ2 +
                5 μ1^2 (47 + 25 Φ2) + μ1 (-73 - 47 Φ2 + 15 μ2 (1 + Φ2))))) -
    (-1 + ηt) θl (4 - 44 μ1 - 120 μ1^2 + 19 μ2 - 29 μ1 μ2 + 20 Φ2 +
        56 μ1 Φ2 + 5 μ2 Φ2 - 19 μ1 μ2 Φ2 +
        4 w^4 (1 - 5 μ1 (8 + μ2 (-1 + Φ2) - 2 Φ2) - 5 μ2 (-1 + Φ2) + 5 Φ2 +
            μ1^2 (7 + 29 Φ2)) + 8 w^3 (-μ2 (1 + 5 θp (Φ1 - Φ2) (-1 + Φ2) + 5 Φ2) +
            2 μ1^2 (25 + 12 θp (Φ1 - Φ2) + 8 Φ2) + (1 + 5 Φ2) ×
              (-1 + θp (-Φ1 + Φ2)) + μ1 (-5 - 11 θp (Φ1 - Φ2) (-1 + Φ2) -
                16 Φ2 + μ2 (11 - 5 θp (Φ1 - Φ2) (-1 + Φ2) + Φ2))) +
        θp (2 μ2 (-67 + 10 Φ1 (-1 + Φ2) + 35 Φ2 - 10 Φ2^2) + 4 ×
              (6 + Φ1 + 5 Φ2 + 5 Φ1 Φ2 - 5 Φ2^2) + μ1^2 (-10 + 145 Φ2 + 9 Φ2^2 +
                Φ1 (-161 + 17 Φ2)) + μ1 (-82 - 61 Φ1 + 21 Φ2 + 85 Φ1 Φ2 -
                59 Φ2^2 + 2 μ2 (65 + 10 Φ1 (-1 + Φ2) + 53 Φ2 - 34 Φ2^2))) +
        2 w^2 (-3 × (4 + 20 Φ2 + μ2 (19 + 5 Φ2) + μ1^2 (-74 + 6 Φ2) -
                μ1 (50 - 36 Φ2 + μ2 (29 + 19 Φ2))) + θp (-4 - 9 Φ1 + 61 Φ2 -
                45 Φ1 Φ2 + 45 Φ2^2 + μ2 (116 - 45 Φ1 (-1 + Φ2) + 55 Φ2 + 45 Φ2^2) -
                2 μ1^2 (98 + 81 Φ2 + Φ2^2 - 3 Φ1 (27 + Φ2)) -
                μ1 (104 - 93 Φ1 - 7 Φ2 + 69 Φ1 Φ2 - 73 Φ2^2 +
                    μ2 (220 + 45 Φ1 (-1 + Φ2) + 209 Φ2 + 3 Φ2^2)))) +
        w (-2 × (4 + 20 Φ2 + 24 μ1^2 (1 + Φ2) + μ2 (31 + 5 Φ2) - μ1
                  (68 + 41 μ2 + 4 Φ2 + 31 μ2 Φ2)) + θp (68 - 6 Φ1 + 106 Φ2 -
                30 Φ1 Φ2 + 30 Φ2^2 - 6 μ2 (-21 + 5 Φ1 (-1 + Φ2) - 44 Φ2 - 5 Φ2^2) +
                μ1^2 (-502 + 41 Φ2 + 5 Φ2^2 + Φ1 (-57 + 33 Φ2)) -
                μ1 (290 - 33 Φ1 - 123 Φ2 - 51 Φ1 Φ2 + 13 Φ2^2 +
                    6 μ2 (63 + 5 Φ1 (-1 + Φ2) + 54 Φ2 + 23 Φ2^2))))) +
η^2 (θp (-12 + 76 μ2 + 41 ηt μ2 - 60 Φ2 - 28 μ2 Φ2 + 7 ηt μ2 Φ2 -
        4 μ1^2 (-3 × (11 + Φ2) + 2 ηt (29 + 7 Φ2)) - μ1 (4 × (-30 + 5 μ2 +
                12 Φ2 + 19 μ2 Φ2) + ηt (-56 + 55 μ2 - 88 Φ2 + 41 μ2 Φ2)) +
        2 w^4 (9 - 83 μ2 + 33 Φ2 + 77 μ2 Φ2 + μ1^2 (-93 + 9 Φ2) +
            μ1 (-84 - 71 μ2 + 42 Φ2 + 83 μ2 Φ2) + ηt (4 - 17 μ2 - 4 Φ2 - 25 μ2 Φ2 +
                90 μ1^2 (1 + Φ2) + μ1 (-86 + 67 μ2 - 4 Φ2 + 17 μ2 Φ2))) -
        2 w (3 ηt (10 + 11 μ2 + 8 μ1^2 (-5 + Φ2) + 26 Φ2 + 5 μ2 Φ2 -
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                μ1 (70 + 21 μ2 - 14 Φ2 + 11 μ2 Φ2)) +
            2 (μ1^2 (-139 + 7 Φ2) + μ1 (-89 - 94 μ2 + 59 Φ2 + 10 μ2 Φ2) +
                2 × (7 - 5 μ2 + 17 Φ2 + 26 μ2 Φ2)) +
        2 w^2 (1 - 123 μ2 + μ1^2 (159 - 51 Φ2) - 19 Φ2 - 99 μ2 Φ2 +
            μ1 (88 + 321 μ2 - 106 Φ2 + 123 μ2 Φ2) +
            3 ηt (-18 - 49 μ2 - 54 Φ2 - 17 μ2 Φ2 + 4 μ1^2 (70 + 11 Φ2) +
                μ1 (82 + 83 μ2 - 100 Φ2 + 49 μ2 Φ2)) +
        w^3 (ηt (-36 × (1 + 5 Φ2) + 4 μ1^2 (347 + 109 Φ2) - μ2
                (221 + 115 Φ2) + μ1 (-40 + 451 μ2 - 440 Φ2 + 221 μ2 Φ2)) +
            8 × (5 + 16 Φ2 + 6 μ2 (-7 + 3 Φ2) - μ1^2 (43 + 5 Φ2) +
                2 μ1 (-16 + 7 Φ2 + 3 μ2 (1 + 7 Φ2)))) + (-1 + ηt) θl
      (w^4 (6 + 60 μ1 (-2 + Φ2) - 5 μ2 (-1 + Φ2) - 5 μ1 μ2 (-1 + Φ2) +
            30 Φ2 + 6 μ1^2 (-13 + 9 Φ2)) + w^3 (12 + μ2 (49 - 25 Φ2) + 60 Φ2 +
            4 μ1^2 (-19 + 25 Φ2) + μ1 (-232 + μ2 + 76 Φ2 - 49 μ2 Φ2)) -
        2 × (3 + 15 Φ2 + μ2 (19 + 5 Φ2) + μ1^2 (-31 + 7 Φ2) -
            μ1 (40 - 16 Φ2 + μ2 (29 + 19 Φ2))) - θp (6 × (-1 + Φ1 - Φ2) ×
              (1 + 5 Φ2) + 2 μ2 (-61 + 15 Φ1 (-1 + Φ2) - 26 Φ2 - 15 Φ2^2) +
            μ1^2 (136 + Φ1 (-109 + Φ2) + 109 Φ2 + 7 Φ2^2) + μ1 (58 - 67 Φ1 + Φ2 + 49
                Φ1 Φ2 - 41 Φ2^2 + 2 μ2 (107 + 15 Φ1 (-1 + Φ2) + 94 Φ2 + 3 Φ2^2))) -
        4 w (3 - 42 μ1 - 51 μ1^2 + 13 μ2 - 23 μ1 μ2 + 15 Φ2 + 27 μ1 Φ2 +
            9 μ1^2 Φ2 + 5 μ2 Φ2 - 13 μ1 μ2 Φ2 + θp (5 + 3 Φ1 - 14 Φ2 + 15 Φ1 Φ2 -
                15 Φ2^2 + μ2 (-47 + 15 Φ1 (-1 + Φ2) - 4 Φ2 - 15 Φ2^2) +
                μ1^2 (32 + 2 Φ1 (-34 + Φ2) + 67 Φ2 + 3 Φ2^2) +
                μ1 (13 - 35 Φ1 + 11 Φ2 + 32 Φ1 Φ2 - 27 Φ2^2 +
                    μ2 (73 + 15 Φ1 (-1 + Φ2) + 68 Φ2 - 9 Φ2^2)))) +
        w^2 (6 × (-5 μ2 (-1 + Φ2) + 4 μ1^2 (6 + Φ2) - μ1 (4 + 5 μ2
                    (-1 + Φ2) + 10 Φ2)) + θp (-10 - 6 Φ1 + 4 Φ2 - 30 Φ1 Φ2 +
                30 Φ2^2 + μ1^2 (60 + Φ1 (163 - 7 Φ2) - 163 Φ2 - 5 Φ2^2) +
                μ2 (26 - 30 Φ1 (-1 + Φ2) - 44 Φ2 + 30 Φ2^2) +
                μ1 (26 + 73 Φ1 - 87 Φ2 - 79 Φ1 Φ2 + 67 Φ2^2 +
                    μ2 (-22 - 30 Φ1 (-1 + Φ2) - 44 Φ2 + 42 Φ2^2))))) +
η^4 (6 θp - 24 ηt θp + 50 θl θp - 50 ηt θl θp + 4 θl μ1 - 4 ηt θl μ1 -
    88 θp μ1 - 40 ηt θp μ1 - 98 θl θp μ1 + 98 ηt θl θp μ1 - 44
     θl μ1^2 + 44 ηt θl μ1^2 + 50 θp μ1^2 + 176 ηt θp μ1^2 - 268
     θl θp μ1^2 + 268 ηt θl θp μ1^2 - 154 θp μ2 - 68 ηt θp
     μ2 + 10 θl θp μ2 - 10 ηt θl θp μ2 + 62 θp μ1 μ2 + 100
     ηt θp μ1 μ2 - 86 θl θp μ1 μ2 + 86 ηt θl θp μ1 μ2 - 19
     θl θp μ1 Φ1 + 19 ηt θl θp μ1 Φ1 - 79 θl θp μ1^2 Φ1 + 79
     ηt θl θp μ1^2 Φ1 + 78 θp Φ2 + 24 ηt θp Φ2 + 10 θl θp
     Φ2 - 10 ηt θl θp Φ2 + 20 θl μ1 Φ2 - 20 ηt θl μ1 Φ2 - 68
     θp μ1 Φ2 - 56 ηt θp μ1 Φ2 + 89 θl θp μ1 Φ2 - 89 ηt θl
     θp μ1 Φ2 - 4 θl μ1^2 Φ2 + 4 ηt θl μ1^2 Φ2 - 74 θp μ1^2
     Φ2 + 16 ηt θp μ1^2 Φ2 + 79 θl θp μ1^2 Φ2 - 79 ηt θl θp
     μ1^2 Φ2 + 46 θp μ2 Φ2 - 16 ηt θp μ2 Φ2 + 98 θl θp μ2
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Φ2 - 98 ηt θl θp μ2 Φ2 + 154 θp μ1 μ2 Φ2 + 68 ηt θp μ1
μ2 Φ2 - 70 θl θp μ1 μ2 Φ2 + 70 ηt θl θp μ1 μ2 Φ2 + 49
θl θp μ1 Φ1 Φ2 - 49 ηt θl θp μ1 Φ1 Φ2 + 19 θl θp μ1^2
Φ1 Φ2 - 19 ηt θl θp μ1^2 Φ1 Φ2 - 21 θl θp μ1 Φ2^2 + 21
ηt θl θp μ1 Φ2^2 + 9 θl θp μ1^2 Φ2^2 - 9 ηt θl θp μ1^2
Φ2^2 - 60 θl θp μ1 μ2 Φ2^2 + 60 ηt θl θp μ1 μ2 Φ2^2 + w^4
((-1 + ηt) θl (-4 + 5 μ2 - 20 Φ2 - 5 μ2 Φ2 + 4 μ1^2 (53 + 31 Φ2) -
      5 μ1 (μ2 (-1 + Φ2) + 8 × (2 + Φ2))) + 2 θp (5 ηt (-7 + 7 μ2 - 11 Φ2 +
          5 μ2 Φ2 + 3 μ1^2 (41 + 19 Φ2) - μ1 (28 + 17 μ2 + 26 Φ2 + 7 μ2 Φ2)) -
      2 × (8 + 170 μ2 + 22 Φ2 + 55 μ2 Φ2 + 5 μ1^2 (-19 + 7 Φ2) -
          μ1 (87 + 280 μ2 - 57 Φ2 + 170 μ2 Φ2))) + w^3
((-1 + ηt) θl (32 μ1^2 (13 + 3 θp (Φ1 - Φ2) + 2 Φ2) + μ2
        (-53 - 20 θp (Φ1 - Φ2) (-1 + Φ2) + 5 Φ2) + 4 × (1 + 5 Φ2) ×
        (-4 + θp (-Φ1 + Φ2)) + μ1 (112 - 44 θp (Φ1 - Φ2) (-1 + Φ2) -
          160 Φ2 + μ2 (43 - 20 θp (Φ1 - Φ2) (-1 + Φ2) + 53 Φ2))) +
   θp (ηt (-52 - 44 Φ2 - 24 μ1 (4 + Φ2) + 5 μ2 (91 + 29 Φ2) +
          4 μ1^2 (97 + 59 Φ2) - 5 μ1 μ2 (149 + 91 Φ2)) +
      8 × (-19 - 47 Φ2 + 2 μ1^2 (83 + Φ2) - 2 μ2 (29 + 52 Φ2) +
          μ1 (111 - 63 Φ2 + μ2 (266 + 58 Φ2)))) + w
(θp (4 × (41 + 68 μ2 + 49 Φ2 + 130 μ2 Φ2 + 8 μ1^2 (-35 + 2 Φ2) -
          μ1 (155 + 328 μ2 - 107 Φ2 + 68 μ2 Φ2)) +
      ηt (88 - 161 μ2 + 128 Φ2 + 17 μ2 Φ2 - 12 μ1^2 (45 + 11 Φ2) +
          μ1 (-212 + 127 μ2 + 116 Φ2 + 161 μ2 Φ2)) +
   (-1 + ηt) θl (3 × (4 - 88 μ1^2 + 20 Φ2 + μ2 (19 + 5 Φ2) -
          μ1 (44 - 40 Φ2 + μ2 (29 + 19 Φ2))) +
      θp (20 + 60 μ2 Φ1 (-1 + Φ2) - 56 Φ2 - 60 Φ2^2 + 12 Φ1 (1 + 5 Φ2) +
          μ1^2 (294 + 3 Φ1 (-89 + Φ2) + 251 Φ2 + 7 Φ2^2) - 2 μ2 (119 + 13 Φ2 +
              30 Φ2^2) + μ1 (74 - 45 Φ2 - 113 Φ2^2 + 3 Φ1 (-45 + 41 Φ2) +
              μ2 (362 + 60 Φ1 (-1 + Φ2) + 322 Φ2 - 36 Φ2^2))))) +
w^2 (-((-1 + ηt) θl (-15 μ2 (-1 + Φ2) + 4 μ1^2 (43 + 11 Φ2) -
          μ1 (44 + 15 μ2 (-1 + Φ2) + 64 Φ2))) +
   θp (-2 (μ1^2 (250 - 178 Φ2) + 4 × (9 + 6 Φ2 - μ2 (104 + 7 Φ2)) +
          μ1 (94 - 250 Φ2 + 8 μ2 (59 + 52 Φ2)) + θl (10 + 3 Φ1 + 23 Φ2 + 15
              Φ1 Φ2 - 15 Φ2^2 + μ2 (22 + 15 Φ1 (-1 + Φ2) + 77 Φ2 - 15 Φ2^2) +
              μ1^2 (-160 + 119 Φ2 + 5 Φ2^2 + Φ1 (-119 + 11 Φ2)) +
              μ1 (-78 - 44 Φ1 + 106 Φ2 + 62 Φ1 Φ2 - 46 Φ2^2 +
                  μ2 (-74 + 15 Φ1 (-1 + Φ2) - 43 Φ2 - 51 Φ2^2)))) +
      ηt (168 + 331 μ2 + 192 Φ2 + 149 μ2 Φ2 - 8 μ1^2 (236 + 55 Φ2) -
          μ1 (112 - 556 Φ2 + μ2 (629 + 331 Φ2)) +
          2 θl (10 + 3 Φ1 + 23 Φ2 + 15 Φ1 Φ2 - 15 Φ2^2 +
              μ2 (22 + 15 Φ1 (-1 + Φ2) + 77 Φ2 - 15 Φ2^2) +
              μ1^2 (-160 + 119 Φ2 + 5 Φ2^2 + Φ1 (-119 + 11 Φ2)) +
              μ1 (-78 - 44 Φ1 + 106 Φ2 + 62 Φ1 Φ2 - 46 Φ2^2 +
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$$\mu 2\left(-74+15\,\Phi 1\,(-1+\Phi 2)-43\,\Phi 2-51\,\Phi 2^2\right)\Big)\Big)\Big)\Big)\Big)\Big)\Big)+$$
$$\eta^6\Big(-4\,\theta p\Big(-2-30\,\mu 2+\mu 1^2\,(51-15\,\Phi 2)+6\,\eta t\,(1+\mu 1)\times(-1+\Phi 2)+$$
$$2\,\Phi 2+\mu 1\,(13-31\,\Phi 2+30\,\mu 2\,(1+\Phi 2))\Big)+w^4$$
$$\Big((-1+\eta t)\,\theta l\,\Big(\mu 1\,(8+5\,\mu 2\,(-1+\Phi 2)-20\,\Phi 2)+5\,\mu 2\,(-1+\Phi 2)-$$
$$2\times(1+5\,\Phi 2)+2\,\mu 1^2\,(29+7\,\Phi 2)\Big)+$$
$$2\,\theta p\,\Big(-23+5\,\mu 2-55\,\Phi 2-143\,\mu 2\,\Phi 2+\mu 1^2\,(95+61\,\Phi 2)+$$
$$\mu 1\,(72+281\,\mu 2+6\,\Phi 2-5\,\mu 2\,\Phi 2)+\eta t\,\Big(10+73\,\mu 2-22\,\Phi 2+5\,\mu 2\,\Phi 2+$$
$$4\,\mu 1^2\,(19+8\,\Phi 2)-\mu 1\,(-2+83\,\mu 2+32\,\Phi 2+73\,\mu 2\,\Phi 2)\Big)\Big)\Big)+$$
$$w^3\Big(-\Big((-1+\eta t)\,\theta l\,\Big(4\,\mu 1^2\,(29+24\,\theta p\,(\Phi 1-\Phi 2)+\Phi 2)-\mu 2$$
$$(19+20\,\theta p\,(\Phi 1-\Phi 2)\,(-1+\Phi 2)+5\,\Phi 2)+4\times(1+5\,\Phi 2)\times$$
$$(-1+\theta p\,(-\Phi 1+\Phi 2))+\mu 1\,(40-44\,\theta p\,(\Phi 1-\Phi 2)\,(-1+\Phi 2)-$$
$$52\,\Phi 2+\mu 2\,(29-20\,\theta p\,(\Phi 1-\Phi 2)\,(-1+\Phi 2)+19\,\Phi 2))\Big)\Big)+$$
$$\theta p\,\Big(8\times\Big(13+44\,\mu 2+8\,\Phi 2+46\,\mu 2\,\Phi 2+\mu 1^2\,(-89+17\,\Phi 2)-2\,\mu 1$$
$$(23+68\,\mu 2-20\,\Phi 2+22\,\mu 2\,\Phi 2)\Big)+\eta t\,\Big(68-123\,\mu 2+4\,\Phi 2+27\,\mu 2$$
$$\Phi 2-12\,\mu 1^2\,(33+7\,\Phi 2)+\mu 1\,(8+69\,\mu 2+88\,\Phi 2+123\,\mu 2\,\Phi 2)\Big)\Big)\Big)+$$
$$w\,\Big(-4\times(-1+\eta t)\,\theta l\,\mu 1\,(1+\mu 1)\times(-1+\Phi 2)+\theta p\,\Big(-2\times(68-$$
$$8\,\Phi 2+5\,\theta l\,\mu 2\,(5+\Phi 2)+12\,\mu 2\,(4+9\,\Phi 2))+$$
$$\mu 1^2\,\Big(476-44\,\Phi 2+\theta l\,\Big(166+5\,\Phi 1-17\,\Phi 2-5\,\Phi 1\,\Phi 2-5\,\Phi 2^2\Big)\Big)+$$
$$\mu 1\,\Big(4\times(37+132\,\mu 2-31\,\Phi 2+24\,\mu 2\,\Phi 2)+$$
$$\theta l\,\Big(22+70\,\mu 2+5\,\Phi 1-89\,\Phi 2+50\,\mu 2\,\Phi 2-5\,\Phi 1\,\Phi 2-5\,\Phi 2^2\Big)\Big)+$$
$$\eta t\,\Big(28\times(-1+\Phi 2)+10\,\mu 2\,(12+\theta l\,(5+\Phi 2))+\mu 1^2$$
$$\Big(-16\times(-1+\Phi 2)+\theta l\,\Big(-166+5\,\Phi 1\,(-1+\Phi 2)+17\,\Phi 2+5\,\Phi 2^2\Big)\Big)-$$
$$\mu 1\,\Big(12\times(1-\Phi 2+10\,\mu 2\,(1+\Phi 2))+\theta l\,\Big(22+5\,\Phi 1-$$
$$89\,\Phi 2-5\,\Phi 1\,\Phi 2-5\,\Phi 2^2+10\,\mu 2\,(7+5\,\Phi 2)\Big)\Big)\Big)\Big)\Big)\Big)+$$
$$w^2\,\Big(4\times(-1+\eta t)\,\theta l\,\mu 1\,(-1-5\,\Phi 2+\mu 1\,(11+\Phi 2))+\theta p$$
$$\Big(2\times\Big(57-227\,\mu 2+\mu 1^2\,(115-151\,\Phi 2)+21\,\Phi 2+$$
$$95\,\mu 2\,\Phi 2+\mu 1\,(52+37\,\mu 2-190\,\Phi 2+227\,\mu 2\,\Phi 2)\Big)+$$
$$5\,\theta l\,\Big(\mu 1^2\,\Big(-52+3\,\Phi 1\,(-5+\Phi 2)+15\,\Phi 2+\Phi 2^2\Big)+$$
$$2\times(1+5\,\Phi 2+\mu 2\,(7+11\,\Phi 2))-\mu 1\,\Big(26+3\,\Phi 1-25\,\Phi 2-$$
$$9\,\Phi 1\,\Phi 2+5\,\Phi 2^2+2\,\mu 2\,\Big(17+13\,\Phi 2+6\,\Phi 2^2\Big)\Big)\Big)+$$
$$\eta t\,\Big(4\times\Big(-21-35\,\mu 2+21\,\Phi 2-4\,\mu 2\,\Phi 2+8\,\mu 1^2\,(5+\Phi 2)+$$
$$\mu 1\,(-29+43\,\mu 2+5\,\Phi 2+35\,\mu 2\,\Phi 2)\Big)-$$
$$5\,\theta l\,\Big(\mu 1^2\,\Big(-52+3\,\Phi 1\,(-5+\Phi 2)+15\,\Phi 2+\Phi 2^2\Big)+$$
$$2\times(1+5\,\Phi 2+\mu 2\,(7+11\,\Phi 2))-\mu 1\,\Big(26+3\,\Phi 1-25\,\Phi 2-$$
$$9\,\Phi 1\,\Phi 2+5\,\Phi 2^2+2\,\mu 2\,\Big(17+13\,\Phi 2+6\,\Phi 2^2\Big)\Big)\Big)\Big)\Big)\Big)\Big)+$$
$$\eta^5\,\Big(50\,\theta p+16\,\eta t\,\theta p+24\,\theta l\,\theta p-24\,\eta t\,\theta l\,\theta p+4\,\theta l\,\mu 1-4\,\eta t\,\theta l\,\mu 1-$$
$$100\,\theta p\,\mu 1+2\,\theta l\,\theta p\,\mu 1-2\,\eta t\,\theta l\,\theta p\,\mu 1+4\,\theta l\,\mu 1^2-4$$
$$\eta t\,\theta l\,\mu 1^2-246\,\theta p\,\mu 1^2-16\,\eta t\,\theta p\,\mu 1^2-166\,\theta l\,\theta p$$
$$\mu 1^2+166\,\eta t\,\theta l\,\theta p\,\mu 1^2+26\,\theta p\,\mu 2-60\,\eta t\,\theta p\,\mu 2+50$$
$$\theta l\,\theta p\,\mu 2-50\,\eta t\,\theta l\,\theta p\,\mu 2-238\,\theta p\,\mu 1\,\mu 2+60\,\eta t\,\theta p\,\mu 1$$
$$\mu 2-70\,\theta l\,\theta p\,\mu 1\,\mu 2+70\,\eta t\,\theta l\,\theta p\,\mu 1\,\mu 2-5\,\theta l\,\theta p\,\mu 1$$
$$\Phi 1+5\,\eta t\,\theta l\,\theta p\,\mu 1\,\Phi 1-5\,\theta l\,\theta p\,\mu 1^2\,\Phi 1+5\,\eta t\,\theta l\,\theta p\,\mu 1^2$$
$$\Phi 1+10\,\theta p\,\Phi 2-16\,\eta t\,\theta p\,\Phi 2-24\,\theta l\,\theta p\,\Phi 2+24\,\eta t\,\theta l$$

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θp Φ2 - 4 θl μ1 Φ2 + 4 ηt θl μ1 Φ2 + 88 θp μ1 Φ2 + 65
θl θp μ1 Φ2 - 65 ηt θl θp μ1 Φ2 - 4 θl μ1^2 Φ2 + 4 ηt
θl μ1^2 Φ2 + 30 θp μ1^2 Φ2 + 16 ηt θp μ1^2 Φ2 + 17 θl θp
μ1^2 Φ2 - 17 ηt θl θp μ1^2 Φ2 + 106 θp μ2 Φ2 + 10 θl
θp μ2 Φ2 - 10 ηt θl θp μ2 Φ2 - 26 θp μ1 μ2 Φ2 + 60 ηt
θp μ1 μ2 Φ2 - 50 θl θp μ1 μ2 Φ2 + 50 ηt θl θp μ1 μ2
Φ2 + 5 θl θp μ1 Φ1 Φ2 - 5 ηt θl θp μ1 Φ1 Φ2 + 5 θl θp
μ1^2 Φ1 Φ2 - 5 ηt θl θp μ1^2 Φ1 Φ2 + 5 θl θp μ1 Φ2^2 - 5
ηt θl θp μ1 Φ2^2 + 5 θl θp μ1^2 Φ2^2 - 5 ηt θl θp μ1^2
Φ2^2 - 2 w^4 ((-1 + ηt) θl (5 μ1 (μ2 (-1 + Φ2) - 6 Φ2) +
      5 μ2 (-1 + Φ2) + 33 μ1^2 (3 + Φ2) - 3 × (1 + 5 Φ2)) +
   θp (ηt (-19 - 35 Φ2 + 20 μ2 (5 + Φ2) + 9 μ1^2 (39 + 17 Φ2) - 4 μ1
          (4 × (4 + 5 Φ2) + 5 μ2 (7 + 5 Φ2))) - 20 × (2 + μ1^2 (-13 + Φ2) +
         4 Φ2 + μ2 (10 + 11 Φ2) - μ1 (11 - 5 Φ2 + 2 μ2 (16 + 5 Φ2))))) +
2 w^3 (-2 × (-1 + ηt) θl (μ2 + μ1^2 (-13 + Φ2) + 5 μ2 Φ2 - μ1
        (1 - 7 Φ2 + μ2 (11 + Φ2))) + θp (34 - 192 μ2 + 3 θl Φ1 -
      15 θl μ2 Φ1 + 62 Φ2 - 3 θl Φ2 + 84 μ2 Φ2 + 15 θl μ2 Φ2 +
      15 θl Φ1 Φ2 + 15 θl μ2 Φ1 Φ2 - 15 θl Φ2^2 - 15 θl μ2 Φ2^2 - 6 μ1^2
        (1 + 12 θl (Φ1 - Φ2) + 27 Φ2) + μ1 (4 + 33 θl (Φ1 - Φ2) (-1 + Φ2) -
          112 Φ2 + 3 μ2 (8 + 5 θl (Φ1 - Φ2) (-1 + Φ2) + 64 Φ2)) +
      ηt (-50 - 3 θl Φ1 - 22 Φ2 + 3 θl Φ2 - 15 θl Φ1 Φ2 + 15 θl Φ2^2 -
          μ2 (137 + 15 θl (Φ1 - Φ2) (-1 + Φ2) + 55 Φ2) + μ1^2 (422 + 72 θl
              (Φ1 - Φ2) + 70 Φ2) + μ1 (24 - 33 θl (Φ1 - Φ2) (-1 + Φ2) -
            126 Φ2 + μ2 (247 - 15 θl (Φ1 - Φ2) (-1 + Φ2) + 137 Φ2))))) +
w^2 (3 θp (-4 × (17 + 9 μ1^2 (-13 + Φ2) + 19 Φ2 + μ2 (36 + 61 Φ2) -
          2 μ1 (32 - 23 Φ2 + μ2 (79 + 18 Φ2))) +
      ηt (μ2 (83 - 11 Φ2) - 36 × (1 + Φ2) + 4 μ1^2 (59 + 13 Φ2) -
          μ1 (56 × (-1 + Φ2) + μ2 (61 + 83 Φ2)))) +
   (-1 + ηt) θl (4 μ1^2 (65 + Φ2) - 3 × (4 + 20 Φ2 + μ2 (19 + 5 Φ2)) +
      μ1 (128 - 116 Φ2 + μ2 (87 + 57 Φ2)) + 2 θp (-2 - 6 Φ1 + 44 Φ2 -
          30 Φ1 Φ2 + 30 Φ2^2 + μ2 (82 - 30 Φ1 (-1 + Φ2) + 44 Φ2 + 30 Φ2^2) -
          μ1^2 (148 + 103 Φ2 + Φ2^2 - Φ1 (103 + 5 Φ2)) -
          μ1 (78 - 61 Φ1 - 13 Φ2 + 43 Φ1 Φ2 - 47 Φ2^2 +
              2 μ2 (79 + 15 Φ1 (-1 + Φ2) + 74 Φ2 + 3 Φ2^2))))) + w
 (-4 × (-1 + ηt) θl μ1 (-1 - 11 Φ2 + μ1 (23 + Φ2)) + θp
    (-60 + 412 μ2 - 84 Φ2 - 64 μ2 Φ2 + 4 μ1^2 (-73 + 61 Φ2) -
      4 μ1 (4 - 82 Φ2 + μ2 (71 + 103 Φ2)) +
      θl (μ1^2 (362 + Φ1 (149 - 29 Φ2) - 137 Φ2 - 9 Φ2^2) -
          6 × (10 × (1 + Φ2) + μ2 (5 + 33 Φ2)) + μ1 (206 + 29 Φ1 -
              125 Φ2 - 89 Φ1 Φ2 + 51 Φ2^2 + 6 μ2 (31 + 25 Φ2 + 20 Φ2^2))) +
      ηt (-4 × (19 × (-1 + Φ2) + 8 μ1^2 (11 + Φ2) - 4 μ2 (7 + 2 Φ2) -
              3 μ1 (9 + 7 Φ2) + 4 μ1 μ2 (11 + 7 Φ2)) + θl
            (60 × (1 + Φ2) + 6 μ2 (5 + 33 Φ2) + μ1^2 (-362 + 137 Φ2 + 9 Φ2^2 +
                Φ1 (-149 + 29 Φ2)) - μ1 (206 + 29 Φ1 - 125 Φ2 - 89 Φ1
```

```
                                                Φ2 + 51 Φ2^2 + 6 μ2 (31 + 25 Φ2 + 20 Φ2^2)))))))))))) /
  (96 (-1 + w (-1 + η))^3 (w (-1 + η) + x (-1 + η) - η)^2
    (x +
       η -
       x
        η)^2 (1 + x + η - x
        η)^2 (-1 + ηt) θl θp)

βμ1 =
  (f w (-1 + η)^2 (-1 + μ1 + 2 μ1^2) × (14 x^2 (2 w (-1 + η) - 3 η) (-1 + η)^2 (-1 + η + θl - ηt θl) θp +
      14 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp +
      x (-1 + η) × (14 (w (-1 + η) - 3 η) (w (-1 + η) - η) (-1 + η) θp -
          (-1 + ηt) θl (-10 + 42 η^2 θp + 5 θp (2 + Φ1 + Φ2) - 2 w (-1 + η) × (-10 + 28 η
                θp + 5 θp (2 + Φ1 + Φ2)) + w^2 (-1 + η)^2 (-10 + θp (24 + 5 Φ1 + 5 Φ2))) +
      θp (10 ηt + η (-14 η^3 + 14 η^2 (1 + (-1 + ηt) θl) - 5 θl (2 + Φ1 + Φ2) +
            5 ηt (-2 + θl (2 + Φ1 + Φ2))) - w^2 (-1 + η)^2 (-10 ηt +
            η (-14 + 14 η + 10 ηt + 24 θl + 5 θl (Φ1 + Φ2) - ηt θl (24 + 5 Φ1 + 5 Φ2))) +
         2 w (-1 + η) × (-10 ηt + η (14 η^2 - 14 η (1 + (-1 + ηt) θl) + 5 θl
                (2 + Φ1 + Φ2) - 5 ηt (-2 + θl (2 + Φ1 + Φ2))))))) /
  (48 (-1 + w (-1 + η))^2 (x (-1 + η) - η) (w + x + η - (w + x) η)^2 (-1 + ηt)
    θp)
```

```
βμ2 = -((f w (-1 + η)^2 (-2 x^2 (2 w (-1 + η) - 3 η)
          (-1 + η)^2 (-1 + η + θl - ηt θl) θp (-1 - μ1 + 2 × (-5 + 7 μ1) μ2) -
        2 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp (-1 - μ1 + 2 × (-5 + 7 μ1) μ2) - x (-1 + η) ×
         (2 (w (-1 + η) - 3 η) (w (-1 + η) - η) (-1 + η) θp (-1 - μ1 + 2 × (-5 + 7 μ1) μ2) -
           (-1 + ηt) θl (-2 × (1 + μ1 - 2 μ2 + 10 μ1 μ2) + η^2 θp
                (-6 - 60 μ2 + μ1 (-6 + 84 μ2)) + θp (1 + μ1 - 2 μ2 + 10 μ1 μ2) × (2 + Φ1 + Φ2) -
              2 w (-1 + η) × (-2 × (1 + μ1 - 2 μ2 + 10 μ1 μ2) + θp (-4 η (1 + μ1) +
                    8 η (-5 + 7 μ1) μ2 + (1 + μ1 - 2 μ2 + 10 μ1 μ2) × (2 + Φ1 + Φ2))) +
              w^2 (-1 + η)^2 (-2 + 4 μ2 + θp (Φ1 + Φ2) - 2 θp μ2 (12 + Φ1 + Φ2) +
                 μ1 (-2 + θp (Φ1 + Φ2) + 2 μ2 (-10 + θp (24 + 5 Φ1 + 5 Φ2))))))) +
        θp (-2 ηt (1 + μ1 - 2 μ2 + 10 μ1 μ2) - 2 η^3 (1 + (-1 + ηt) θl) ×
             (-1 - μ1 + 2 × (-5 + 7 μ1) μ2) + η^4 (-2 × (1 + μ1) + 4 × (-5 + 7 μ1) μ2) -
           η (1 + μ1 - 2 μ2 + 10 μ1 μ2) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2))) -
           2 w (-1 + η) × (-2 ηt (1 + μ1 - 2 μ2 + 10 μ1 μ2) - 2 η^2 (1 + (-1 + ηt) θl) ×
                (-1 - μ1 + 2 × (-5 + 7 μ1) μ2) + η^3 (-2 × (1 + μ1) + 4 × (-5 + 7 μ1) μ2) -
              η (1 + μ1 - 2 μ2 + 10 μ1 μ2) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2)))) +
           w^2 (-1 + η)^2 (-2 ηt (1 + μ1 - 2 μ2 + 10 μ1 μ2) + η^2 (-2 × (1 + μ1) +
                 4 × (-5 + 7 μ1) μ2) + η (2 + 4 × (5 - 6 θl) μ2 - θl (-1 + 2 μ2) (Φ1 + Φ2) +
                 μ1 (2 + θl (Φ1 + Φ2) + 2 μ2 (-14 + θl (24 + 5 Φ1 + 5 Φ2))) +
                 ηt (2 + 4 × (-1 + 6 θl) μ2 + θl (-1 + 2 μ2) (Φ1 + Φ2) -
                    μ1 (-2 + θl (Φ1 + Φ2) + 2 μ2 (-10 + θl (24 + 5 Φ1 + 5 Φ2)))))))))) /
    (48 (-1 + w (-1 + η))^2 (x (-1 + η) - η) (w + x + η - (w + x) η)^2
      (-1 + ηt)
      θp))
```

```
βcv = -((-cv (1 + x + η - x η)^2 (8 × (9 cv^2 + 40 u - 12 ϵ) (-1 + w (-1 + η))^3
          (x + η - x η)^3 (w + x + η - w η - x η)^3 (-1 + ηt) θp + f (-1 + η) ×
          (2 w^5 (-1 + η)^5 (2 η^2 θp (-30 η^4 + η^2 (77 - 25 ηt) - 16 ηt + 5 η^3 (5 + 6 ηt) +
                η (-72 + 11 ηt + 8 θl (26 + 5 Φ1 + 5 Φ2) - 8 ηt θl (26 + 5 Φ1 + 5 Φ2))) + 2
             x^3 (-1 + η)^3 ((-1 + η) × (-72 + 30 η^2 + η (5 - 30 ηt) - 5 ηt) θp +
                8 × (-1 + ηt) θl (-2 + θp (26 + 5 Φ1 + 5 Φ2))) - x^2 (-1 + η)^2 (180 η^4 θp +
                29 ηt θp + η (432 + ηt) θp - 30 η^3 (5 + 6 ηt) θp + 6 η^2 (-77 + 25 ηt) θp +
                η (-1 + ηt) θl (-67 + 48 θp (26 + 5 Φ1 + 5 Φ2))) + x (-1 + η) η
             (180 η^4 θp + η (432 - 49 ηt) θp + 79 ηt θp - 30 η^3 (5 + 6 ηt) θp + 6 η^2
                (-77 + 25 ηt) θp + η (-1 + ηt) θl (-17 + 48 θp (26 + 5 Φ1 + 5 Φ2)))) +
           (x + η - x η)^2 (4 x^4 (-1 + η)^4 θp (48 + 90 η^3 - 6 η^2 (24 - 5 θl + 5 ηt (2 + θl)) -
                8 θl (17 + 3 Φ2) + ηt (-27 + 8 θl (17 + 3 Φ2)) + η (6 - 27 θl + 6 θl Φ2 +
                  ηt (87 + 27 θl - 6 θl Φ2))) - 16 x^3 (-1 + η)^3 (3 × (-1 + η) η
                (-16 + 30 η^2 + 9 ηt - 2 η (9 + 10 ηt)) θp - (-1 + ηt) θl (-4 + θp
                  (30 η^3 - 2 × (2 + 4 Φ1 + Φ2) + 3 η^2 (-9 + 2 Φ2) - 8 η (17 + 3 Φ2)))) +
             η^2 θp (360 η^5 - 70 ηt - 24 η^4 (24 - 5 θl + 5 ηt (2 + θl)) -
                12 η^3 (-2 + 9 θl - 2 θl Φ2 + ηt (-29 - 9 θl + 2 θl Φ2)) +
                η (70 ηt - 101 θl Φ1 - 29 θl (2 + Φ2) + ηt θl (101 Φ1 + 29 × (2 + Φ2))) +
                4 η^2 (48 - 8 θl (17 + 3 Φ2) + ηt (-27 + 8 θl (17 + 3 Φ2)))) - 4 x (-1 + η)
```

```
      η (360 η^5 θp - 14 ηt θp - 24 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp +
        η (14 ηt θp + (-1 + ηt) θl (28 + 87 θp Φ1 + 27 θp (2 + Φ2))) -
        12 η^3 θp (-2 + θl (9 - 2 Φ2) + ηt (-29 + θl (-9 + 2 Φ2))) +
        4 η^2 θp (48 - 8 θl (17 + 3 Φ2) + ηt (-27 + 8 θl (17 + 3 Φ2)))) + x^2
      (-1 + η)^2 (2160 η^5 θp - 94 ηt θp - 144 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp +
        η (94 ηt θp + (-1 + ηt) θl (68 + 375 θp Φ1 + 111 θp (2 + Φ2))) -
        72 η^3 θp (-2 + θl (9 - 2 Φ2) + ηt (-29 + θl (-9 + 2 Φ2))) +
        24 η^2 θp (48 - 8 θl (17 + 3 Φ2) + ηt (-27 + 8 θl (17 + 3 Φ2)))) +
  w (x (-1 + η) - η) (-1 + η) × (-4 x^5 (-1 + η)^5 θp (168 + 90 η^3 - 15 η^2
          (5 + 6 ηt) - 4 θl (86 + Φ1 + 9 Φ2) + ηt (-22 + 4 θl (86 + Φ1 + 9 Φ2)) +
        η (-183 + 37 θl + 6 θl Φ2 + ηt (112 - 37 θl - 6 θl Φ2)) + η^2
      θp (360 η^6 - 18 ηt - 60 η^5 (-13 + 6 ηt) - 4 η^4
          (615 - θl (127 + 6 Φ2) + ηt (68 + θl (127 + 6 Φ2))) + 4 η^3
          (186 - θl (425 + 4 Φ1 + 18 Φ2) + ηt (239 + θl (425 + 4 Φ1 + 18 Φ2))) +
        3 η^2 (192 - θl (602 + 101 Φ1 + 125 Φ2) + ηt (-38 +
              θl (602 + 101 Φ1 + 125 Φ2))) + η (-θl (238 + 239 Φ1 + 135 Φ2) +
            ηt (-192 + θl (238 + 239 Φ1 + 135 Φ2)))) + 4 x^4 (-1 + η)^4
      ((-1 + η) × (450 η^3 + η^2 (345 - 450 ηt) + 9 × (-16 + 9 ηt) -
            2 η (501 + 35 ηt)) θp - (-1 + ηt) θl (-48 + θp (-24 × (19 + 4 Φ1 +
                  4 Φ2) + 5 η^2 (55 + 6 Φ2) - η (1801 + 20 Φ1 + 162 Φ2)))) +
    x^2 (-1 + η)^2 (3600 η^6 θp - 36 ηt θp - 120 η^5 (-29 + 30 ηt) θp -
        8 η^4 θp (2211 - 5 θl (91 + 6 Φ2) + 5 ηt (-4 + θl (91 + 6 Φ2))) +
        8 η^3 θp (894 - θl (1963 + 20 Φ1 + 126 Φ2) + ηt
              (673 + θl (1963 + 20 Φ1 + 126 Φ2))) + 3 η (-138 ηt θp + (-1 + ηt)
              θl (-6 + θp (250 + 261 Φ1 + 141 Φ2))) + 9 η^2 (2 × (192 - 83 ηt) θp +
            (-1 + ηt) θl (60 + θp (1234 + 241 Φ1 + 265 Φ2)))) - x
      (-1 + η) η (1800 η^6 θp + 54 ηt θp - 60 η^5 (-47 + 30 ηt) θp -
        4 η^4 θp (2643 - 5 θl (109 + 6 Φ2) + 5 ηt (32 + θl (109 + 6 Φ2))) +
        8 η^3 θp (456 - 2 θl (511 + 5 Φ1 + 27 Φ2) +
            ηt (467 + 2 θl (511 + 5 Φ1 + 27 Φ2))) + 6 η (-72 ηt θp + (-1 + ηt)
              θl (15 + θp (122 + 125 Φ1 + 69 Φ2))) + 3 η^2 (6 × (128 - 51 ηt) θp +
            (-1 + ηt) θl (112 + θp (2450 + 449 Φ1 + 521 Φ2)))) - x^3
      (-1 + η)^3 (3600 η^5 θp - 120 η^4 (-11 + 30 ηt) θp - 8 η^3 θp
          (1779 - 5 θl (73 + 6 Φ2) + 5 ηt (-40 + θl (73 + 6 Φ2))) +
        2 θp (-8 θl (16 + 17 Φ1 + 9 Φ2) + ηt (-141 + 8 θl (16 + 17 Φ1 + 9 Φ2))) +
        16 η^2 θp (438 - θl (941 + 10 Φ1 + 72 Φ2) +
            ηt (206 + θl (941 + 10 Φ1 + 72 Φ2))) + 3 η ((768 - 338 ηt) θp +
            (-1 + ηt) θl (132 + θp (2462 + 503 Φ1 + 527 Φ2)))) +
  w^2 (-1 + η)^2 (4 x^6 (-1 + η)^6 θp (72 + 30 η^3 - 5 η^2 (5 + 6 ηt) +
        η (-77 + 25 ηt) - 4 θl (40 + Φ1 + 3 Φ2) + ηt (5 + 4 θl (40 + Φ1 + 3 Φ2))) -
    12 x^5 (-1 + η)^5 ((-1 + η) × (-168 + 60 η^3 + 22 ηt - 20 η^2
              (-5 + 3 ηt) - η (129 + 100 ηt)) θp + (-1 + ηt) θl
          (16 + 4 θp (90 + 9 Φ1 + 11 Φ2) + η θp (283 + 8 Φ1 + 18 Φ2))) +
    η^2 θp (120 η^7 + 64 ηt - 20 η^6 (-49 + 6 ηt) - 4 η^5 (32 + 245 ηt) +
```

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    4 η^4 (-909 + ηt (161 + θl (-41 + 4 Φ1 - 6 Φ2)) + θl (41 - 4 Φ1 + 6 Φ2)) +
    2 η (-8 θl (12 + 9 Φ1 + 7 Φ2) + ηt (-59 + 8 θl (12 + 9 Φ1 + 7 Φ2))) +
    3 η^3 (696 - θl (1542 + 117 Φ1 + 149 Φ2) + ηt (330 + θl (1542 + 117 Φ1 +
          149 Φ2))) + 3 η^2 (192 - θl (782 + 239 Φ1 + 231 Φ2) +
       ηt (-160 + θl (782 + 239 Φ1 + 231 Φ2)))) + x^2 (-1 + η)^2
  (1800 η^7 θp + 58 ηt θp - 300 η^6 (-31 + 6 ηt) θp - 60 η^5 (119 + 155 ηt) θp +
    12 η^4 θp (-2334 + 785 ηt - 10 θl (25 + 2 Φ1) + 5 ηt θl (50 + 4 Φ1)) +
    2 η (-2 ηt θp + (-1 + ηt) θl (-67 + 24 θp (12 + 9 Φ1 + 7 Φ2))) +
    12 η^3 ((1716 + 371 ηt) θp + (-1 + ηt) θl
        (73 + θp (3780 + 333 Φ1 + 413 Φ2))) + 9 η^2 (384 θp - 314 ηt θp +
       (-1 + ηt) θl (24 + θp (1582 + 511 Φ1 + 471 Φ2)))) + 3 x^4 (-1 + η)^4
  (600 η^5 θp - 100 η^4 (-13 + 6 ηt) θp - 20 η^3 (134 + 65 ηt) θp + 4 η^2 θp
      (-699 - 5 θl (117 + 4 Φ1 + 6 Φ2) + 5 ηt (105 + θl (117 + 4 Φ1 + 6 Φ2))) +
    2 θp (96 - 8 θl (50 + 17 Φ1 + 15 Φ2) + ηt
        (-101 + 8 θl (50 + 17 Φ1 + 15 Φ2))) + η (2 × (1692 + ηt) θp +
       (-1 + ηt) θl (196 + θp (7338 + 711 Φ1 + 871 Φ2)))) - x
  (-1 + η) η (720 η^7 θp + 158 ηt θp - 240 η^6 (-20 + 3 ηt) θp -
    12 η^5 (169 + 400 ηt) θp + 12 η^4 θp
      (-1347 + ηt (330 + θl (15 + 8 Φ1 - 6 Φ2)) + θl (-15 - 8 Φ1 + 6 Φ2)) +
    η (-50 ηt θp + 2 × (-1 + ηt) θl (-17 + 24 θp (12 + 9 Φ1 + 7 Φ2))) +
    6 η^3 (2 × (864 + 287 ηt) θp + (-1 + ηt) θl
        (56 + θp (3822 + 315 Φ1 + 395 Φ2))) + 3 η^2 (8 × (96 - 83 ηt) θp +
       (-1 + ηt) θl (90 + θp (3146 + 989 Φ1 + 933 Φ2)))) - x^3
  (-1 + η)^3 (4 × (-1 + η) × (600 η^5 + η^3 (90 - 2800 ηt) + 27 ηt -
        200 η^4 (-14 + 3 ηt) - 12 η^2 (474 + 5 ηt) + η (-576 + 507 ηt)) θp +
      (-1 + ηt) θl (40 η^3 θp (173 + 8 Φ1 + 6 Φ2) + 16 × (-4 + θp
            (12 + 9 Φ1 + 7 Φ2)) + 6 η^2 (156 + θp (7458 + 693 Φ1 + 853 Φ2)) +
       3 η (-18 + θp (3182 + 1055 Φ1 + 951 Φ2))))) + w^4 (-1 + η)^4
(4 x^4 (-1 + η)^4 θp (216 + 90 η^3 - 15 η^2 (5 + 6 ηt) + 3 η (-77 + 25 ηt) -
      8 θl (68 + 10 Φ1 + 9 Φ2) + ηt (15 + 8 θl (68 + 10 Φ1 + 9 Φ2)) + η^2
  θp (360 η^5 + 192 ηt - 12 η^3 (102 + 5 ηt) - 60 η^4 (-1 + 6 ηt) +
    2 η (336 - 16 θl (61 + 14 Φ1 + 15 Φ2) +
       ηt (-149 + 16 θl (61 + 14 Φ1 + 15 Φ2))) + η^2 (132 - θl (2010 +
          287 Φ1 + 255 Φ2) + ηt (526 + θl (2010 + 287 Φ1 + 255 Φ2)))) + 3
  x^2 (-1 + η)^2 (720 η^5 θp + 58 ηt θp + 12 η^3 (-179 + 20 ηt) θp -
    240 η^4 (θp + 3 ηt θp) + 2 η (14 × (24 - 5 ηt) θp + (-1 + ηt) θl
        (-67 + 16 θp (61 + 14 Φ1 + 15 Φ2))) + η^2 (2 × (498 + 281 ηt) θp +
       (-1 + ηt) θl (24 + θp (4186 + 607 Φ1 + 543 Φ2)))) - x
  (-1 + η) η (1440 η^5 θp + 474 ηt θp + 12 η^3 (-383 + 10 ηt) θp -
    120 η^4 (θp + 12 ηt θp) + 6 η (3 × (112 - 39 ηt) θp + (-1 + ηt) θl
        (-17 + 16 θp (61 + 14 Φ1 + 15 Φ2))) + η^2 (36 × (35 + 43 ηt) θp +
       (-1 + ηt) θl (90 + θp (8206 + 1181 Φ1 + 1053 Φ2)))) -
  x^3 (-1 + η)^3 (4 × (-1 + η) × (-168 + 360 η^3 + 31 ηt - 30 η^2
        (-5 + 12 ηt) - 3 η (283 + 50 ηt)) θp +
      (-1 + ηt) θl (32 × (-6 + θp (61 + 14 Φ1 + 15 Φ2)) +
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                η (-18 + θp (8538 + 1247 Φ1 + 1119 Φ2)))) ) + w^3 (-1 + η)^3
          (4 x^5 (-1 + η)^5 (3 × (-1 + η) × (-72 + 30 η^2 + η (5 - 30 ηt) - 5 ηt) θp +
              4 × (-1 + ηt) θl (4 + θp (124 + 11 Φ1 + 11 Φ2)) ) - x^4 (-1 + η)^4
            (1800 η^4 θp + 60 η^2 (-92 + 7 ηt) θp - 60 η^3 (7 + 30 ηt) θp +
              2 η (1062 + 869 ηt) θp - 288 θp (-7 + θl (17 + 3 Φ1 + 3 Φ2)) +
              2 ηt θp (-179 + 144 θl (17 + 3 Φ1 + 3 Φ2)) +
              η (-1 + ηt) θl (196 + θp (9506 + 871 Φ1 + 823 Φ2)) ) + x (-1 + η) η
            (1800 η^6 θp + 474 ηt θp - 60 η^5 (-47 + 30 ηt) θp - 60 η^4 (119 + 47 ηt) θp +
              6 η ((96 - 115 ηt) θp + (-1 + ηt) θl (-17 + 8 θp (70 + 27 Φ1 + 27 Φ2))) +
              2 η^3 (8 × (-387 + 322 ηt) θp + (-1 + ηt) θl
                  (56 + θp (3898 + 395 Φ1 + 299 Φ2))) + η^2 (4 × (2034 - 79 ηt) θp +
                9 × (-1 + ηt) θl (30 + θp (2194 + 351 Φ1 + 367 Φ2))) ) - x^2
            (-1 + η)^2 (3600 η^6 θp + 174 ηt θp - 120 η^4 (113 + 29 ηt) θp -
              120 η^5 (-29 + 30 ηt) θp + 6 η ((96 - 74 ηt) θp +
                  (-1 + ηt) θl (-67 + 8 θp (70 + 27 Φ1 + 27 Φ2))) +
              4 η^3 (3 × (-522 + 685 ηt) θp + (-1 + ηt) θl (73 + θp
                      (4222 + 413 Φ1 + 341 Φ2))) + 3 η^2 ((4056 - 290 ηt) θp +
                3 × (-1 + ηt) θl (24 + θp (3282 + 543 Φ1 + 559 Φ2))) ) - η^2
          θp (360 η^6 + 192 ηt - 60 η^5 (-13 + 6 ηt) - 12 η^4 (122 + 65 ηt) +
              η^3 (-1908 - 149 θl Φ1 - 101 θl (14 + Φ2) +
                  ηt (1234 + 149 θl Φ1 + 101 θl (14 + Φ2))) + 2 η (96 -
                  8 θl (70 + 27 Φ1 + 27 Φ2) + ηt (-177 + 8 θl (70 + 27 Φ1 + 27 Φ2))) +
              η^2 (2040 - 3 θl (1650 + 255 Φ1 + 271 Φ2) + ηt
                    (68 + θl (4950 + 765 Φ1 + 813 Φ2))) ) + x^3 (-1 + η)^3
            (4 × (-1 + η) × (900 η^4 + 6 × (-8 + 9 ηt) - 30 η^3 (-41 + 30 ηt) -
                  30 η^2 (63 + 41 ηt) + 5 η (-414 + 53 ηt) ) θp +
              (-1 + ηt) θl (16 × (-12 + θp (70 + 27 Φ1 + 27 Φ2)) +
                  2 η^2 (156 + θp (9014 + 853 Φ1 + 757 Φ2)) +
                  3 η (-18 + θp (6546 + 1119 Φ1 + 1135 Φ2)) ))))) +
8 cσ f (-1 + η)^2 (w^5 (-1 + η)^6 (2 x^5 (-1 + η)^5 θp (η - ηt + 4 μ1) -
        2 x^4 (-1 + η)^3 ((-1 + ηt) θl (-4 + 4 μ1 + μ2) + (-1 + η) θp
              (4 + 5 η^2 + 12 μ1 + η (2 - 5 ηt + 20 μ1 - 7 μ2) + ηt (-2 + 7 μ2) ) ) -
        2 η θp (η^5 + ηt μ2 + 2 η ηt (-2 - 2 μ1 + μ2) - η^4 (-2 + ηt - 4 μ1 + 7 μ2) +
            η^3 (5 + 12 μ1 - 13 μ2 + ηt (-2 + 7 μ2)) + η^2
              (4 + 8 μ1 + 8 μ2 + ηt (-5 + 10 μ1 + 8 μ2)) ) +
        x (10 η^6 θp + η^3 (-2 θp (7 + 24 μ1 - 63 μ2) + ηt θp (-11 + 53 μ1 - 5 μ2) +
                (-1 + ηt) θl (-11 + 15 μ1 - μ2)) + 2 η^5
            θp (3 - 5 ηt + 20 μ1 - 28 μ2) - ηt θp (3 + 3 μ1 + 5 μ2) + η
            (ηt θp (13 + 11 μ1 - 9 μ2) - (-1 + ηt) θl (3 + 3 μ1 + μ2)) + 2
            η^4 θp (11 + 28 μ1 - 11 μ2 + ηt (-3 + 28 μ2)) - η^2
            (2 × (-1 + ηt) θl (7 + 8 μ1 + μ2) +
              24 θp (1 + 2 μ1 + 2 μ2) + ηt θp (-17 + 61 μ1 + 37 μ2)) ) -
        2 x^2 (-1 + η) × (10 η^5 θp + 2 η^4 θp (1 - 5 ηt + 20 μ1 - 21 μ2) - θl
            μ2 + ηt (θp + θl μ2 - 5 θp μ2) - η ((-1 + ηt) θl (11 + 12 μ1 - μ2) +
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            12 θp (1 + 2 μ1 + 2 μ2) + ηt θp (-11 + 23 μ1 + 22 μ2)) + η^3
        θp (32 μ1 + 3 × (5 + μ2) + ηt (-2 + 42 μ2)) + η^2 ((-1 + ηt) θl
            (-15 + 19 μ1) + θp (-15 - 48 μ1 + 23 ηt μ1 + 63 μ2 - 15 ηt μ2))) +
    x^3 (-1 + η)^2 ((-1 + ηt) θl (-8 - 8 μ1 + 31 η μ1 + 3 η (-9 + μ2) + 4 μ2) +
        (-1 + η) θp (20 η^3 + 8 × (1 + 2 μ1 + 2 μ2) - 4 η^2 (-4 + 5 ηt - 20 μ1 + 14 μ2) +
            ηt (-7 + 13 μ1 + 19 μ2) + 2 η (17 + 48 μ1 - 13 μ2 + 4 ηt (-2 + 7 μ2)))) +
    w^4 (-1 + η)^4 (6 x^6 (-1 + η)^7 θp (η - ηt + 4 μ1) + η θp (6 η^7 + η^6
        (16 - 6 ηt + 24 μ1 - 42 μ2) + 12 η ηt (1 + μ1 - 2 μ2) - 6
        ηt μ2 + 2 η^5 (29 + 39 μ1 - 39 μ2 + ηt (-8 + 21 μ2)) + η^4
        (50 + 42 μ1 + 130 μ2 + 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
            μ1 (18 + Φ1 + 5 Φ2)) - ηt (4 - 110 μ1 - 46 μ2 +
            3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
        2 η^3 (32 + 39 μ1 - 25 μ2 - 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
            μ1 (18 + Φ1 + 5 Φ2)) + ηt (-2 + 20 μ1 + 9 μ2 +
            3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
        η^2 (66 + 66 μ1 + 60 μ2 - 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
            μ1 (18 + Φ1 + 5 Φ2)) + ηt (-10 + 82 μ1 + 40 μ2 +
            3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) -
    x^5 (-1 + η)^5 (6 × (-1 + ηt) θl (10 μ1 + 3 μ2) + θp (36 η^3 - 6 ×
            (9 + 17 μ1) - 2 η^2 (7 + 18 ηt - 72 μ1 + 21 μ2) +
        2 η (16 - 21 μ1 + 21 μ2 + 7 ηt (1 + 3 μ2)) + 3 θl (μ2 (6 + 3 Φ1 - Φ2) +
            3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)) - ηt (-22 + 42 μ2 +
            3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
    x^2 (-1 + η)^2 (90 η^6 θp - 10 η^5 θp (-13 + 9 ηt - 36 μ1 + 42 μ2) - 6
        (θl μ2 - ηt θl μ2 + ηt θp (2 + 3 μ1 + 9 μ2)) + 2 η^4 θp
        (238 + 330 μ1 - 150 μ2 + 5 ηt (-13 + 42 μ2)) - 3 η
        (2 θp (33 + 33 μ1 + 30 μ2 + ηt (-6 + 31 μ1 + 33 μ2)) +
            (-1 + ηt) θl (2 × (8 + 9 μ1 - 6 μ2) +
            3 θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
        2 η^3 (-θp (27 - 78 μ1 + 501 μ2 + ηt (41 + 288 μ1 + 63 μ2)) +
            3 × (-1 + ηt) θl (3 - 54 μ1 - 9 μ2 + 5 θp
                (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) - 6
        η^2 (θp (92 + 111 μ1 + 17 μ2 + ηt (-19 + 62 μ1 + 49 μ2)) +
            (-1 + ηt) θl (13 - 13 μ1 - 14 μ2 + 6 θp
                (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
    x^3 (-1 + η)^3 (-((-1 + η) θp (66 + 120 η^4 + 66 μ1 + 60 μ2 - 20 η^3
                (-11 + 6 ηt - 24 μ1 + 21 μ2) + ηt (-1 + 67 μ1 + 91 μ2) +
            4 η^2 (161 + 255 μ1 - 120 μ2 + 5 ηt (-11 + 21 μ2)) +
            η (490 + 576 μ1 + 262 μ2 + ηt (-86 + 356 μ1 + 370 μ2))) +
        3 × (-1 + ηt) θl (4 + 4 μ1 - 10 μ2 + θp (μ2 (6 + 3 Φ1 - Φ2) +
            3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)) + 2 η^2 (3 - 74 μ1 - 15 μ2 +
            5 θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))) +
            η (19 - 25 μ1 - 35 μ2 + 8 θp (μ2 (6 + 3 Φ1 - Φ2) +
                3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))) +
    x^4 (-1 + η)^4 (2 × (-1 + η) θp (60 + 45 η^3 + 72 μ1 + 42 μ2 - 5 η^2
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                (-11 + 9 ηt - 36 μ1 + 21 μ2) + ηt (-10 + 41 μ1 + 47 μ2) +
              η (148 + 255 μ1 - 60 μ2 + 5 ηt (-11 + 21 μ2))) - (-1 + ηt) θl
            (6 × (2 - 4 μ1 - 7 μ2 + θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
                  μ1 (18 + Φ1 + 5 Φ2))) + η (6 - 268 μ1 - 66 μ2 + 15 θp
                 (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) -
      x (-1 + η) × (36 η^7 θp + 2 η^6 θp (37 - 18 ηt + 72 μ1 - 105 μ2) - 3
          ηt θp (3 + 3 μ1 + 5 μ2) + η
          (3 ηt θp (3 + μ1 - 23 μ2) - 3 × (-1 + ηt) θl (3 + 3 μ1 + μ2)) + 2
          η^5 θp (3 × (44 + 61 μ1 - 45 μ2) + ηt (-37 + 105 μ2)) - 3
          η^2 (θp (66 + 66 μ1 + 60 μ2 + ηt (-15 + 67 μ1 + 49 μ2)) +
             (-1 + ηt) θl (2 × (6 + 7 μ1 - μ2) + 3 θp
                 (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
         η^3 (θp (6 × (52 + 63 μ1 - 11 μ2) + ηt (-53 + 205 μ1 + 127 μ2)) +
             3 × (-1 + ηt) θl (11 - 9 μ1 - 7 μ2 + 8 θp
                 (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) +
         η^4 (2 θp (68 + 33 μ1 + 297 μ2 + ηt (6 + 206 μ1 + 74 μ2)) -
             (-1 + ηt) θl (6 - 88 μ1 - 12 μ2 + 15 θp
                 (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
      w^3 (-1 + η)^3 (6 x^7 (-1 + η)^8 θp (η - ηt + 4 μ1) - x^6 (-1 + η)^6
          (6 × (-1 + η) θp (19 + 7 η^2 + 27 μ1 + 7 ηt (-1 + μ2) - 7 η (-1 + ηt - 4 μ1 + μ2)) +
            (-1 + ηt) θl (78 μ1 - 2 × (3 + μ2) +
               θp (-108 - 12 μ2 - Φ1 + μ1 (-96 + 9 Φ1 - 17 Φ2) - 5 Φ2 + 22 μ2 Φ2))) +
         η θp (-6 η^8 + 6 ηt μ2 + 12 η ηt (1 + μ1 + 5 μ2) + 6 η^7 (-6 + ηt - 4 μ1 + 7 μ2) -
            2 η^6 (77 + 69 μ1 - 81 μ2 + 3 ηt (-6 + 7 μ2)) - η^5 (2 × (76 + 88 μ1 + 55 μ2) +
               θl (122 + 4 Φ1 + μ2 (14 + 3 Φ1 - 19 Φ2) - 2 μ1 (-55 + Φ1 - 12 Φ2) + 8 Φ2) +
               ηt (-32 + 166 μ1 + 88 μ2 - θl (122 + 4 Φ1 + μ2 (14 + 3 Φ1 - 19 Φ2) -
                  2 μ1 (-55 + Φ1 - 12 Φ2) + 8 Φ2))) + η^3 (4 × (47 + 50 μ1 + 31 μ2) -
               θl (230 + 56 Φ1 + μ2 (122 + 57 Φ1 - 17 Φ2) + 52 Φ2 + 10 μ1
                  (29 + Φ1 + 8 Φ2)) + ηt (-50 + 210 μ1 + 28 μ2 + θl (230 + 56 Φ1 +
                  μ2 (122 + 57 Φ1 - 17 Φ2) + 52 Φ2 + 10 μ1 (29 + Φ1 + 8 Φ2)))) + η^2
             (42 + 70 μ1 + 60 μ2 - θl (54 + 26 Φ1 + 22 Φ2 + μ2 (54 + 27 Φ1 + Φ2) +
                 μ1 (90 + 6 Φ1 + 28 Φ2)) + ηt (-12 + 38 μ1 + 66 μ2 + θl (54 + 26 Φ1 +
                  22 Φ2 + μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^4
             (118 + 68 μ1 - 278 μ2 - θl (298 + 34 Φ1 + μ2 (82 + 33 Φ1 - 37 Φ2) +
                 38 Φ2 + 2 μ1 (155 + Φ1 + 38 Φ2)) + ηt
                (-2 × (12 + 47 μ1 + 15 μ2) + θl (298 + 34 Φ1 + μ2 (82 + 33 Φ1 - 37 Φ2) +
                  38 Φ2 + 2 μ1 (155 + Φ1 + 38 Φ2))))) + x^5 (-1 + η)^5
          ((-1 + η) θp (126 η^3 + η (766 + 972 μ1 + 252 ηt (-1 + μ2) - 204 μ2) -
               126 η^2 (-2 + ηt - 4 μ1 + 2 μ2) + 26 × (11 + 13 μ1 + 6 μ2) +
               ηt (-77 + 107 μ1 + 127 μ2)) + (-1 + ηt) θl
             (-16 + 88 μ1 + 50 μ2 - θp (270 + 28 Φ1 + μ2 (78 + 27 Φ1 - 43 Φ2) + 32 Φ2 +
                 μ1 (282 - 12 Φ1 + 62 Φ2)) + η (-27 + 449 μ1 - 7 μ2 - θp (662 + 9 Φ1 +
                  μ2 (74 + 3 Φ1 - 129 Φ2) + 33 Φ2 + μ1 (590 - 47 Φ1 + 109 Φ2))))) -
      x^4 (-1 + η)^4 (2 × (-1 + η) θp (107 + 105 η^4 + 135 μ1 + 5 η^2 (212 +
                 243 μ1 + 63 ηt (-1 + μ2) - 102 μ2) + 124 μ2 -
               105 η^3 (-3 + ηt - 4 μ1 + 3 μ2) + ηt (-19 + 87 μ1 + 86 μ2) +
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        η (746 + 845 μ1 + 265 μ2 + ηt (-191 + 297 μ1 + 319 μ2))) +
    (-1 + ηt) θl (2 - 10 μ1 + 112 μ2 - θp (216 + 53 Φ1 + 2 μ2
          (60 + 27 Φ1 - 10 Φ2) + 49 Φ2 + μ1 (276 + 3 Φ1 + 73 Φ2)) +
        η^2 (8 × (-6 + 127 μ1 - μ2) - 5 θp (338 + 6 Φ1 + μ2 (38 + 3 Φ1 -
              63 Φ2) + 18 Φ2 + μ1 (302 - 20 Φ1 + 58 Φ2))) +
        η (-76 + 438 μ1 + 188 μ2 - θp (μ2 (394 + 141 Φ1 - 209 Φ2) +
              2 × (689 + 73 Φ1 + 83 Φ2) + μ1 (1438 - 46 Φ1 + 324 Φ2))))) +
x^3 (-1 + η)^3 (2 × (-1 + η) θp (21 + 105 η^5 + 35 μ1 + 10 η^3 (155 +
          162 μ1 + 42 ηt (-1 + μ2) - 102 μ2) + 30 μ2 -
        105 η^4 (-4 + ηt - 4 μ1 + 4 μ2) + ηt (21 + 40 μ1 + 87 μ2) +
        η (436 + 540 μ1 + 464 μ2 + ηt (-82 + 391 μ1 + 338 μ2)) +
        η^2 (2 × (777 + 845 μ1 + 140 μ2) + ηt (-379 + 653 μ1 + 641 μ2))) +
    (-1 + ηt) θl (6 × (2 + 2 μ1 + 11 μ2) - θp (54 + 26 Φ1 + 22 Φ2 +
          μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)) +
        2 η^3 (-21 + 567 μ1 - μ2 - 5 θp (230 + 5 Φ1 + μ2 (26 + 3 Φ1 - 41 Φ2) +
              13 Φ2 + μ1 (206 - 11 Φ1 + 41 Φ2))) -
        η (6 × (6 + 10 μ1 - 49 μ2) + θp (878 + 215 Φ1 + μ2 (482 +
              219 Φ1 - 77 Φ2) + 199 Φ2 + μ1 (1118 + 19 Φ1 + 299 Φ2))) +
        2 η^2 (-66 + 393 μ1 + 132 μ2 - θp (μ2 (398 + 147 Φ1 - 203 Φ2) +
              2 × (703 + 76 Φ1 + 86 Φ2) + μ1 (1466 - 32 Φ1 + 338 Φ2))))) -
x^2 (-1 + η)^2 (126 η^7 θp - 126 η^6 θp (-4 + ηt - 4 μ1 + 5 μ2) + 2 η^5
      θp (950 + 963 μ1 - 705 μ2 + 63 ηt (-4 + 5 μ2)) - 6
      (θl μ2 - ηt θl μ2 + ηt θp (8 + 9 μ1 + 17 μ2)) - 3 η
      (2 θp (21 + 35 μ1 + 30 μ2 + ηt (6 + 26 μ1 + 63 μ2)) +
        (-1 + ηt) θl (4 + 6 μ1 - 32 μ2 + θp (54 + 26 Φ1 + 22 Φ2 +
              μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^4
      (2 θp (351 + 475 μ1 + 1050 μ2 + ηt (-61 + 712 μ1 + 329 μ2)) +
        (-1 + ηt) θl (2 × (-9 + 313 μ1 + μ2) - 5 θp (352 + 9 Φ1 +
              μ2 (40 + 6 Φ1 - 60 Φ2) + 21 Φ2 + μ1 (316 - 13 Φ1 + 65 Φ2)))) - 3
      η^2 (2 θp (201 + 235 μ1 + 186 μ2 + 2 ηt (-29 + 91 μ1 + 43 μ2)) +
        (-1 + ηt) θl (26 + 30 μ1 - 84 μ2 + θp (446 + 109 Φ1 + μ2 (242 + 111 Φ1 -
              37 Φ2) + 101 Φ2 + μ1 (566 + 13 Φ1 + 153 Φ2)))) + 2
      η^3 (-θp (950 + 880 μ1 - 618 μ2 + ηt (-244 + 61 μ1 + 146 μ2)) +
        (-1 + ηt) θl (-50 + 305 μ1 + 82 μ2 - θp (μ2 (402 + 153 Φ1 - 197 Φ2) +
              2 × (717 + 79 Φ1 + 89 Φ2) + μ1 (1494 - 18 Φ1 + 352 Φ2))))) +
x (-1 + η) × (42 η^8 θp - 3 ηt θp (3 + 3 μ1 + 5 μ2) - 42 η^7 θp (-5 + ηt -
        4 μ1 + 6 μ2) + 2 η^6 θp (421 + 402 μ1 - 384 μ2 + 21 ηt (-5 + 6 μ2)) - 3
      η ((-1 + ηt) θl (3 + 3 μ1 + μ2) + ηt θp (17 + 19 μ1 + 51 μ2)) - 3
      η^2 (2 θp (21 + 35 μ1 + 30 μ2 + ηt (-3 + 19 μ1 + 45 μ2)) +
        (-1 + ηt) θl (2 × (4 + 5 μ1 - 5 μ2) + θp (54 + 26 Φ1 + 22 Φ2 +
              μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^5
      (θp (584 + 718 μ1 + 800 μ2 + ηt (-121 + 771 μ1 + 395 μ2)) +
        (-1 + ηt) θl (-3 + 137 μ1 + μ2 - θp (718 + 21 Φ1 +
              μ2 (82 + 15 Φ1 - 117 Φ2) + 45 Φ2 + μ1 (646 - 19 Φ1 + 137 Φ2)))) -
    η^3 (2 θp (389 + 435 μ1 + 310 μ2 + ηt (-115 + 387 μ1 + 107 μ2)) +
        (-1 + ηt) θl (10 × (4 + 4 μ1 - 7 μ2) + θp (906 + 221 Φ1 + μ2 (486 +
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                    225 Φ1 - 71 Φ2) + 205 Φ2 + μ1 (1146 + 33 Φ1 + 313 Φ2)))) +
        η^4 (θp (-774 - 610 μ1 + 183 ηt μ1 + 1020 μ2 + 5 ηt (37 + μ2)) +
            (-1 + ηt) θl (-28 + 174 μ1 + 38 μ2 - θp (μ2 (406 + 159 Φ1 - 191 Φ2) +
                2 × (731 + 82 Φ1 + 92 Φ2) + μ1 (1522 - 4 Φ1 + 366 Φ2))))) +
w^2 (-1 + η)^2 (2 x^8 (-1 + η)^9 θp (η - ηt + 4 μ1) - x^7 (-1 + η)^7
    (2 × (-1 + η) θp (49 + 8 η^2 + 57 μ1 + η (17 - 8 ηt + 32 μ1 - 7 μ2) +
          ηt (-17 + 7 μ2)) + (-1 + ηt) θl (4 + 44 μ1 +
          θp (-102 - Φ1 + μ1 (-74 + 3 Φ1 - 11 Φ2) - 7 Φ2 + 2 μ2 (-6 + 5 Φ2)))) +
    x^6 (-1 + η)^6 (2 × (-1 + η) θp (119 + 28 η^3 + 165 μ1 + 54 μ2 -
          7 η^2 (-17 + 4 ηt - 16 μ1 + 7 μ2) + ηt (-41 + 28 μ1 + 49 μ2) +
          η (398 + 399 μ1 - 76 μ2 + 7 ηt (-17 + 7 μ2))) + (-1 + ηt) θl
        (-22 + 94 μ1 - 6 μ2 + θp (μ1 (-260 + 41 Φ1 - 37 Φ2) - 3 × (72 + Φ1 + 5 Φ2) +
              μ2 (-52 + 66 Φ2)) + η (24 + 324 μ1 + θp (-738 - 80 μ2 -
                7 Φ1 + 2 μ1 (-270 + 5 Φ1 - 44 Φ2) - 49 Φ2 + 70 μ2 Φ2)))) +
    η θp (2 η^9 - 2 ηt μ2 - 28 η ηt (1 + μ1 + 2 μ2) - 2 η^8 (-16 + ηt - 4 μ1 +
          7 μ2) + 2 η^7 (87 + 53 μ1 - 69 μ2 + ηt (-16 + 7 μ2)) + η^5
        (-90 + 64 μ1 + 198 ηt μ1 + 366 μ2 + 40 ηt μ2 - 3 × (-1 + ηt) θl
            (94 + 4 Φ1 + μ2 (18 + 3 Φ1 - 19 Φ2) + 8 Φ2 + μ1 (108 - 3 Φ1 + 23 Φ2))) -
        η^2 (4 × (5 + 5 μ1 + 4 μ2) - θl (48 + 25 Φ1 + 19 Φ2 + μ2 (50 + 27 Φ1 + 11 Φ2) +
              μ1 (48 + 11 Φ1 + 19 Φ2)) + ηt (-8 - 26 μ1 + 64 μ2 + θl (48 + 25 Φ1 +
                19 Φ2 + μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^3
        (-2 × (43 + 85 μ1 + 86 μ2) + 3 θl (42 + 20 Φ1 + μ2 (46 + 21 Φ1 - 5 Φ2) +
              16 Φ2 + μ1 (76 - Φ1 + 21 Φ2)) + ηt (2 × (30 - 57 μ1 + μ2) - 3 θl (42 +
                20 Φ1 + μ2 (46 + 21 Φ1 - 5 Φ2) + 16 Φ2 + μ1 (76 - Φ1 + 21 Φ2)))) +
        η^6 (156 + 216 μ1 - 38 μ2 + θl (126 + 8 μ2 + Φ1 + 7 Φ2 - 10 μ2 Φ2 +
              μ1 (96 + 8 Φ1 + 22 Φ2)) - ηt (48 - 116 μ1 - 84 μ2 +
              θl (126 + 8 μ2 + Φ1 + 7 Φ2 - 10 μ2 Φ2 + μ1 (96 + 8 Φ1 + 22 Φ2)))) + η^4
        (12 × (-14 - 17 μ1 + μ2) + θl (234 + 46 Φ1 + μ2 (134 + 45 Φ1 - 73 Φ2) +
              46 Φ2 + μ1 (408 - 31 Φ1 + 91 Φ2)) +
            ηt (-6 × (-7 + 33 μ1 + 3 μ2) - θl (234 + 46 Φ1 + μ2
                  (134 + 45 Φ1 - 73 Φ2) + 46 Φ2 + μ1 (408 - 31 Φ1 + 91 Φ2))))) +
    x^5 (-1 + η)^5 (-((-1 + η) θp (226 + 112 η^4 + 394 μ1 + 352 μ2 - 14 η^3
                (-51 + 8 ηt - 32 μ1 + 21 μ2) + ηt (-91 + 169 μ1 + 129 μ2) +
              6 η^2 (453 + 399 μ1 - 152 μ2 + 7 ηt (-17 + 7 μ2)) +
              2 η (777 + 990 μ1 + 175 μ2 + 6 ηt (-41 + 33 μ1 + 49 μ2)))) + (-1 + ηt)
        θl (52 + 60 μ1 - 42 μ2 + θp (174 + 28 Φ1 + μ2 (118 + 27 Φ1 - 91 Φ2) +
              28 Φ2 + μ1 (346 - 62 Φ1 + 60 Φ2)) + 3 η^2 (-20 × (1 + 16 μ1) +
              θp (762 + 76 μ2 + 7 Φ1 + 49 Φ2 - 70 μ2 Φ2 + μ1 (562 + Φ1 + 99 Φ2))) +
            η (101 - 615 μ1 + 21 μ2 + θp (1362 + 314 μ2 + 27 Φ1 + 9 μ2 Φ1 +
                  99 Φ2 - 387 μ2 Φ2 + μ1 (1624 - 214 Φ1 + 254 Φ2)))) -
    x^4 (-1 + η)^4 (-2 × (-1 + η) θp (53 + 70 η^5 + 95 μ1 + 106 μ2 - 35 η^4
              (-17 + 2 ηt - 8 μ1 + 7 μ2) + ηt (-20 + 27 μ1 + 60 μ2) +
            5 η^3 (508 + 399 μ1 - 228 μ2 + 7 ηt (-17 + 7 μ2)) +
            5 η^2 (420 + 495 μ1 + 13 μ2 + 3 ηt (-41 + 38 μ1 + 49 μ2)) +
            η (589 + 985 μ1 + 792 μ2 + ηt (-223 + 495 μ1 + 327 μ2))) + (-1 + ηt) θl
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      (-2 + 34 μ1 - 104 μ2 + θp (108 + 51 Φ1 + 2 μ2 (64 + 27 Φ1 - 12 Φ2) +
            39 Φ2 + μ1 (208 - 13 Φ1 + 53 Φ2)) + 5 η^3 (-8 × (2 + 37 μ1) + θp
             (786 + 72 μ2 + 7 Φ1 + 49 Φ2 - 70 μ2 Φ2 + 2 μ1 (292 + 6 Φ1 + 55 Φ2))) +
        η^2 (8 × (23 - 190 μ1 + 3 μ2) + 5 θp (714 + 158 μ2 + 18 Φ1 +
                9 μ2 Φ1 + 54 Φ2 - 189 μ2 Φ2 + μ1 (844 - 91 Φ1 + 143 Φ2))) +
        η (2 × (104 + 89 μ1 - 84 μ2) + θp (930 + 606 μ2 + 158 Φ1 + 153
                 μ2 Φ1 + 158 Φ2 - 437 μ2 Φ2 + μ1 (1792 - 279 Φ1 + 331 Φ2)))) ) +
x^2 (-1 + η)^2 (56 η^8 θp - 14 η^7 θp (-47 + 4 ηt - 16 μ1 + 21 μ2) + 2 η^6
      θp (1497 + 1085 μ1 - 993 μ2 + 7 ηt (-47 + 21 μ2)) - 2
      (θl μ2 - ηt θl μ2 + ηt θp (26 + 27 μ1 + 41 μ2)) - η
      (4 θp (3 × (5 + 5 μ1 + 4 μ2) + ηt (17 + 7 μ1 + 86 μ2)) +
        (-1 + ηt) θl (-2 × (16 + 15 μ1 + 46 μ2) + 3 θp (48 + 25 Φ1 + 19 Φ2 +
                μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^5
      (2 θp (561 + 1278 μ1 + 460 μ2 + 6 ηt (-43 + 120 μ1 + 98 μ2)) -
        3 × (-1 + ηt) θl (-4 × (2 + 47 μ1) + θp (834 + 64 μ2 + 7 Φ1 +
                49 Φ2 - 70 μ2 Φ2 + 2 μ1 (314 + 17 Φ1 + 66 Φ2)))) + η^2
      (-2 θp (36 × (8 + 15 μ1 + 16 μ2) + ηt (-180 + 214 μ1 + 147 μ2)) +
        (-1 + ηt) θl (-54 - 178 μ1 + 252 μ2 - 3 θp (234 + 266 μ2 + 111 Φ1 +
                117 μ2 Φ1 + 87 Φ2 - 39 μ2 Φ2 + μ1 (436 - 16 Φ1 + 116 Φ2)))) + η^4
      (2 θp (-1141 - 505 μ1 + ηt (187 + 560 μ1 - 63 μ2) + 1912 μ2) +
        (-1 + ηt) θl (-74 + 1050 μ1 + 6 μ2 - 5 θp (780 + 27 Φ1 +
                2 μ2 (80 + 9 Φ1 - 90 Φ2) + 63 Φ2 + μ1 (908 - 59 Φ1 + 175 Φ2)))) +
    2 η^3 (-θp (956 + 1400 μ1 + 632 μ2 + ηt (-308 + 1025 μ1 + 312 μ2)) +
        (-1 + ηt) θl (-104 - 27 μ1 + 84 μ2 - θp (μ2 (638 + 189 Φ1 - 401 Φ2) +
                2 × (525 + 97 Φ1 + 97 Φ2) + μ1 (1916 - 217 Φ1 + 393 Φ2)))) ) -
x (-1 + η) × (16 η^9 θp + 2 η^8 θp (111 - 8 ηt + 32 μ1 - 49 μ2) - ηt θp
      (3 + 3 μ1 + 5 μ2) + 2 η^7 θp (554 + 367 μ1 - 407 μ2 + ηt (-111 + 49 μ2)) - η
      ((-1 + ηt) θl (3 + 3 μ1 + μ2) + ηt θp (77 + 79 μ1 + 135 μ2)) - η^2
      (2 θp (6 × (5 + 5 μ1 + 4 μ2) + ηt (5 - 19 μ1 + 128 μ2)) +
        (-1 + ηt) θl (-2 × (2 + μ1 + 17 μ2) + 3 θp (48 + 25 Φ1 + 19 Φ2 +
                μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^6
      (2 θp (356 + 591 μ1 + 35 μ2 + ηt (-127 + 318 μ1 + 245 μ2)) -
        (-1 + ηt) θl (-4 × (1 + 26 μ1) + θp (858 + 60 μ2 + 7 Φ1 +
                49 Φ2 - 70 μ2 Φ2 + μ1 (650 + 45 Φ1 + 143 Φ2)))) + η^3
      (-2 θp (14 × (13 + 25 μ1 + 26 μ2) + ηt (-125 + 179 μ1 + 42 μ2)) +
        (-1 + ηt) θl (-28 - 72 μ1 + 74 μ2 - θp (486 + 542 μ2 + 231 Φ1 +
                243 μ2 Φ1 + 183 Φ2 - 69 μ2 Φ2 + μ1 (892 - 22 Φ1 + 242 Φ2)))) +
    η^5 (θp (-2 × (368 + 5 μ1 - 949 μ2) + ηt (73 + 789 μ1 + 93 μ2)) +
        (-1 + ηt) θl (-13 + 239 μ1 + 3 μ2 - θp (1626 + 322 μ2 + 63 Φ1 + 45 μ2 Φ1 +
                135 Φ2 - 351 μ2 Φ2 + μ1 (1880 - 86 Φ1 + 382 Φ2)))) + η^4
      (-θp (898 + 1210 μ1 + 280 μ2 + ηt (-259 + 1023 μ1 + 201 μ2)) +
        (-1 + ηt) θl (2 × (-26 + μ1 + 21 μ2) - θp (1110 + 212 Φ1 + μ2 (654 + 207
                Φ1 - 383 Φ2) + 212 Φ2 + μ1 (1978 - 186 Φ1 + 424 Φ2)))) ) +
x^3 (-1 + η)^3 (-2 × (-1 + η) θp (56 η^6 + 2 × (5 + 5 μ1 + 4 μ2) - 7 η^5
        (-85 + 8 ηt - 32 μ1 + 35 μ2) + ηt (25 + 20 μ1 + 76 μ2) +
      5 η^4 (563 + 399 μ1 - 304 μ2 + 7 ηt (-17 + 7 μ2)) +
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                10 η^3 (301 + 330 μ1 - 41 μ2 + ηt (-82 + 86 μ1 + 98 μ2)) +
                η (4 × (53 + 95 μ1 + 103 μ2) + ηt (-80 + 139 μ1 + 240 μ2)) +
                η^2 (ηt (-437 + 1135 μ1 + 663 μ2) + 2 × (613 + 985 μ1 + 704 μ2))) +
            (-1 + ηt) θl (-2 × (14 + 14 μ1 + 29 μ2) + θp (48 + 25 Φ1 + 19 Φ2 +
                μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)) +
                η (24 + 140 μ1 - 282 μ2 + 3 θp (150 + 71 Φ1 + μ2 (174 + 75 Φ1 -
                        29 Φ2) + 55 Φ2 + μ1 (284 - 14 Φ1 + 74 Φ2))) +
                2 η^3 (83 - 905 μ1 + 3 μ2 + 5 θp (498 + 15 Φ1 + μ2 (106 + 9 Φ1 -
                        123 Φ2) + 39 Φ2 + μ1 (584 - 50 Φ1 + 106 Φ2))) +
                5 η^4 (-12 × (1 + 21 μ1) + θp (810 + 68 μ2 + 7 Φ1 + 49 Φ2 -
                        70 μ2 Φ2 + μ1 (606 + 23 Φ1 + 121 Φ2))) +
                η^2 (6 × (52 + 29 μ1 - 42 μ2) + θp (2 μ2 (622 + 171 Φ1 - 419 Φ2) +
                        44 × (45 + 8 Φ1 + 8 Φ2) + μ1 (3708 - 496 Φ1 + 724 Φ2))))) -
    w (x (-1 + η) - η) (-1 + η) × (2 x^7 (-1 + η)^7 θp (-15 + 5 η^2 + 5 ηt + 15
            θl - 5 η (-2 + ηt - 3 μ1) - 15 μ1 + 7 θl μ1 + θl Φ2 - ηt θl (15 + 7 μ1 + Φ2)) +
        x^6 (-1 + η)^6 (-2 × (-1 + η) θp (29 + 35 η^2 + 71 μ1 + η (139 - 35 ηt +
                105 μ1 - 21 μ2) + 10 μ2 + 2 ηt (-11 + 7 μ2)) + (-1 + ηt) θl
            (-8 - 28 × (2 + η) μ1 + η θp (234 + 14 Φ2 + 7 μ1 (16 + Φ1 + Φ2)) +
                2 θp (33 + Φ1 + 6 Φ2 - 2 μ2 (-7 + 5 Φ2) + μ1 (59 - 7 Φ1 + 7 Φ2)))) +
        x^5 (-1 + η)^5 (2 × (-1 + η) θp (37 + 105 η^3 + 121 μ1 + 92 μ2 +
                5 ηt (-5 + 8 μ1 + 7 μ2) - 3 η^2 (-173 + 35 ηt - 105 μ1 + 42 μ2) +
                η (227 + 426 μ1 - 15 μ2 + 2 ηt (-66 + 7 μ1 + 42 μ2))) -
            (-1 + ηt) θl (26 + 14 μ1 + 6 μ2 + θp (48 + 3 Φ1 + μ2 (68 - 66 Φ2) +
                11 Φ2 + μ1 (204 - 55 Φ1 + 23 Φ2)) +
                2 η^2 (-70 μ1 + 3 θp (129 + 7 Φ2 + 7 μ1 (9 + Φ1 + Φ2))) -
                2 η (20 + 186 μ1 + θp (μ1 (-376 + 31 Φ1 - 53 Φ2) +
                        20 μ2 (-4 + 3 Φ2) - 6 × (37 + Φ1 + 6 Φ2)))) +
        η θp (-10 η^8 + 6 ηt (2 + 2 μ1 + 3 μ2) + 2 η^7 (-44 + 5 ηt - 15 μ1 + 21 μ2) +
            η^6 (-66 - 112 μ1 + 88 μ2 - 2 θl (27 + Φ2) - 7 θl μ1 (4 + Φ1 + Φ2) +
                ηt (34 - 28 μ1 - 28 μ2 + 2 θl (27 + Φ2) + 7 θl μ1 (4 + Φ1 + Φ2))) + η
            (-θl (12 + 8 Φ1 + 6 Φ2 + 2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)) +
                ηt (-4 - 10 μ1 + 30 μ2 + θl (12 + 8 Φ1 + 6 Φ2 +
                        2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)))) + η^2
            (40 × (1 + μ1 + μ2) - θl (48 + 24 Φ1 + 3 μ2 (18 + 9 Φ1 - Φ2) + 14 Φ2 +
                μ1 (46 - 5 Φ1 + 13 Φ2)) + ηt (-2 × (14 + 25 μ1 + 3 μ2) + θl (48 +
                        24 Φ1 + 3 μ2 (18 + 9 Φ1 - Φ2) + 14 Φ2 + μ1 (46 - 5 Φ1 + 13 Φ2)))) +
            2 η^5 (21 - 50 μ1 - 81 μ2 - θl (57 + Φ1 - 10 μ2 (-1 + Φ2) + 6 Φ2 +
                μ1 (81 + 4 Φ1 + 18 Φ2)) + ηt (3 - 72 μ1 - 21 μ2 +
                θl (57 + Φ1 - 10 μ2 (-1 + Φ2) + 6 Φ2 + μ1 (81 + 4 Φ1 + 18 Φ2)))) + η^3
            (2 × (23 + 65 μ1 + 74 μ2) - θl (66 + 26 Φ1 + μ2 (86 + 27 Φ1 - 47 Φ2) +
                18 Φ2 + μ1 (162 - 40 Φ1 + 30 Φ2)) +
                ηt (2 × (-6 + 91 μ1 + 6 μ2) + θl (66 + 26 Φ1 + μ2 (86 + 27 Φ1 - 47 Φ2) +
                        18 Φ2 + μ1 (162 - 40 Φ1 + 30 Φ2)))) + η^4
            (12 × (3 + 6 μ1 - 13 μ2) - θl (90 + 12 Φ1 + μ2 (66 + 9 Φ1 - 57 Φ2) +
                20 Φ2 + μ1 (262 - 26 Φ1 + 52 Φ2)) +
                ηt (2 × (-9 + 19 μ1 + 8 μ2) + θl (90 + 12 Φ1 + μ2 (66 + 9 Φ1 - 57 Φ2) +
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                20 Φ2 + μ1 (262 - 26 Φ1 + 52 Φ2)))))) +
x^4 (-1 + η)^4 (-((-1 + η) θp (86 + 350 η^4 + 170 μ1 + 228 μ2 + ηt
          (-41 + 49 μ1 + 45 μ2) - 10 η^3 (-207 + 35 ηt - 105 μ1 + 63 μ2) +
         2 η (209 + 605 μ1 + 246 ηt μ1 + 384 μ2 + 25 ηt (-5 + 7 μ2)) +
         10 η^2 (140 + 213 μ1 - 45 μ2 + 2 ηt (-33 + 7 μ1 + 21 μ2))) + (-1 + ηt)
    θl (56 + 112 μ1 - 6 μ2 + θp (30 + 8 Φ1 + μ2 (66 + 9 Φ1 - 65 Φ2) +
          μ1 (122 - 60 Φ1 + 10 Φ2)) +
       5 η^3 (-56 μ1 + θp (282 + 14 Φ2 + 7 μ1 (20 + 3 Φ1 + 3 Φ2))) -
       2 η^2 (8 × (5 + 58 μ1) + 5 θp (μ1 (-199 + 10 Φ1 - 32 Φ2) -
              3 × (41 + Φ1 + 6 Φ2) + μ2 (-38 + 30 Φ2))) +
       η (95 - 29 μ1 + 15 μ2 + θp (282 + 24 Φ1 + μ2 (338 + 9 Φ1 - 321 Φ2) +
              64 Φ2 + μ1 (1078 - 246 Φ1 + 144 Φ2)))) -
x^3 (-1 + η)^3 (-((-1 + η) θp (350 η^5 + 8 × (5 + 5 μ1 + 6 μ2) + ηt
          (-32 - 54 μ1 + 30 μ2) - 10 η^4 (-241 + 35 ηt - 105 μ1 + 84 μ2) +
         4 η^2 (233 + 605 μ1 + 292 ηt μ1 + 308 μ2 + 25 ηt (-5 + 7 μ2)) +
         20 η^3 (111 + 142 μ1 - 55 μ2 + 2 ηt (-22 + 7 μ1 + 14 μ2)) +
         η (8 × (43 + 85 μ1 + 109 μ2) + ηt (-155 + 281 μ1 + 189 μ2))) +
    (-1 + ηt) θl (2 × (5 + 7 μ1 - 15 μ2) + θp (2 μ2 (20 + 9 Φ1 - 6 Φ2) +
          5 × (6 + 3 Φ1 + Φ2) + μ1 (34 - 11 Φ1 + 7 Φ2)) +
       10 η^4 (-28 μ1 + θp (153 + 7 Φ2 + 7 μ1 (11 + 2 Φ1 + 2 Φ2))) -
       4 η^3 (20 + 278 μ1 + 5 θp (3 μ1 Φ1 + 4 μ2 (-6 + 5 Φ2) -
              5 μ1 (28 + 5 Φ2) - 2 × (45 + Φ1 + 6 Φ2))) +
       η (6 × (26 + 55 μ1 - 5 μ2) + 2 θp (78 + 25 Φ1 + μ2 (142 + 27 Φ1 -
                121 Φ2) + 9 Φ2 + μ1 (264 - 110 Φ1 + 30 Φ2))) +
       η^2 (129 - 171 μ1 + 9 μ2 + θp (648 + 66 Φ1 + 12 μ2 (56 + 3 Φ1 -
                52 Φ2) + 146 Φ2 + μ1 (2272 - 434 Φ1 + 346 Φ2))))) +
x^2 (-1 + η)^2 (-((-1 + η) θp (210 η^6 - 6 η ηt (14 + 26 μ1 - 17 μ2) +
         8 η (15 + 15 μ1 + 17 μ2) - 30 η^5
          (-55 + 7 ηt - 21 μ1 + 21 μ2) + ηt (11 + 11 μ1 + 51 μ2) +
         4 η^3 (257 + 605 μ1 + 338 ηt μ1 + 232 μ2 + 25 ηt (-5 + 7 μ2)) +
         10 η^4 (193 + 213 μ1 - 120 μ2 + ηt (-66 + 28 μ1 + 42 μ2)) +
         3 η^2 (ηt (-73 + 183 μ1 + 99 μ2) + 4 × (43 + 85 μ1 + 104 μ2))) +
    (-1 + ηt) θl (-6 × (2 + 2 μ1 + 3 μ2) + θp (12 + 8 Φ1 + 6 Φ2 +
          2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)) +
       η (23 + 37 μ1 - 57 μ2 + θp (μ2 (134 + 63 Φ1 - 27 Φ2) -
              3 μ1 (-38 + 9 Φ1 - 9 Φ2) + 6 × (18 + 9 Φ1 + 4 Φ2))) +
       η^5 (-140 μ1 + 3 θp (330 + 14 Φ2 + 7 μ1 (24 + 5 Φ1 + 5 Φ2))) -
       6 η^2 (-24 - 54 μ1 + 7 μ2 - θp (48 + 17 Φ1 + 2 μ2 (38 + 9 Φ1 - 28 Φ2) +
              9 Φ2 + μ1 (142 - 50 Φ1 + 20 Φ2))) + 2 η^4 (-4 × (5 + 81 μ1) + 5 θp
            (μ2 (34 - 30 Φ2) + 3 × (49 + Φ1 + 6 Φ2) + μ1 (221 + Φ1 + 43 Φ2))) +
       η^3 (77 - 199 μ1 - 3 μ2 + θp (732 + 84 Φ1 + μ2 (668 + 54 Φ1 - 606 Φ2) +
              164 Φ2 + μ1 (2388 - 376 Φ1 + 404 Φ2)))) +
x (-1 + η) × (70 η^8 θp + 2 η^7 θp (274 - 35 ηt + 105 μ1 - 126 μ2) - 6
    ηt θp (3 + 3 μ1 + 4 μ2) - η (ηt θp (1 - 5 μ1 + 75 μ2) +
       2 × (-1 + ηt) θl (-3 × (1 + μ1 + 2 μ2) + θp
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                (12 + 8 Φ1 + 6 Φ2 + 2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)))) +
        η^2 (θp (ηt (91 + 163 μ1 - 15 μ2) - 8 × (15 + 15 μ1 + 16 μ2)) +
            (-1 + ηt) θl (-13 - 23 μ1 + 27 μ2 - θp (126 + 63 Φ1 +
                2 μ2 (74 + 36 Φ1 - 9 Φ2) + 33 Φ2 + μ1 (126 - 21 Φ1 + 33 Φ2)))) +
        η^3 (-θp (8 × (28 + 70 μ1 + 83 μ2) + ηt (-65 + 601 μ1 + 93 μ2)) +
            2 × (-1 + ηt) θl (-22 - 53 μ1 + 9 μ2 - θp (114 + 43 Φ1 +
                μ2 (162 + 45 Φ1 - 103 Φ2) + 27 Φ2 + μ1 (304 - 90 Φ1 + 50 Φ2)))) -
        2 η^5 (-θp (-158 + 179 μ1 + 471 μ2 + ηt (7 + 314 μ1 + 91 μ2)) +
            (-1 + ηt) θl (-4 - 74 μ1 + θp (μ2 (64 - 60 Φ2) +
                6 × (53 + Φ1 + 6 Φ2) + μ1 (464 + 13 Φ1 + 97 Φ2)))) + η^4
          (-θp (218 + 530 μ1 - 480 μ2 + ηt (-113 + 317 μ1 + 143 μ2)) +
            (-1 + ηt) θl (-17 + 71 μ1 + 3 μ2 - θp (408 + 51 Φ1 + μ2 (332 + 36 Φ1 -
                294 Φ2) + 91 Φ2 + μ1 (1252 - 159 Φ1 + 231 Φ2)))) - 2
          η^6 (-14 × (-1 + ηt) θl μ1 + θp (-130 - 321 μ1 + 189 μ2 -
              θl (177 + 7 Φ2 + 7 μ1 (13 + 3 Φ1 + 3 Φ2)) + ηt (97 - 70 μ1 -
                84 μ2 + θl (177 + 7 Φ2 + 7 μ1 (13 + 3 Φ1 + 3 Φ2)))))) -
  (x + η - x η)^2 (-2 x^6 (-1 + η)^6 θp (3 + 8 η^2 - 3 θl - 11 μ1 + 7 θl μ1 + η
          (-11 + 4 θl - 4 ηt (1 + θl) + 11 μ1) + θl Φ2 + ηt (4 - θl (-3 + 7 μ1 + Φ2)) +
      x^5 (-1 + η)^5 (2 × (-1 + η) θp (-2 + 48 η^2 + 26 μ1 + 10 μ2 +
            ηt (-8 + 7 μ2) - 2 η (1 + 12 ηt - 33 μ1 + 7 μ2)) - (-1 + ηt)
          θl (-4 + 48 η^2 θp + 16 θp μ2 + θp Φ1 + 5 θp Φ2 - 10 θp μ2 Φ2 +
            η (-28 μ1 + 7 θp μ1 (14 + Φ1 + Φ2) + 4 θp (-5 + 3 Φ2)) +
            μ1 (-12 + θp (44 - 11 Φ1 + 3 Φ2))) +
      η θp (-16 η^7 + 4 ηt μ2 + 2 η^6 (-5 - 4 θl + 4 ηt (1 + θl) - 11 μ1 + 14 μ2) +
          η^5 (14 - 30 μ1 - 8 μ2 - 2 θl (5 + Φ2) - 7 θl μ1 (4 + Φ1 + Φ2) +
            ηt (8 - 28 μ1 - 14 μ2 + 2 θl (5 + Φ2) + 7 θl μ1 (4 + Φ1 + Φ2))) + η^2
          (4 × (5 + 5 μ1 + 6 μ2) - θl (12 - 10 μ1 (-1 + Φ1) + 5 Φ1 +
              2 μ2 (8 + 3 Φ1 - 4 Φ2) + Φ2) + ηt (4 - 4 μ2 +
              θl (12 - 10 μ1 (-1 + Φ1) + 5 Φ1 + 2 μ2 (8 + 3 Φ1 - 4 Φ2) + Φ2))) +
          η^4 (-4 ηt (3 + 7 μ1) + 2 × (-5 + μ1 - 40 μ2) - θl (8 + Φ1 + 5 Φ2 -
              2 μ2 (-6 + 5 Φ2) + 2 μ1 (33 + 7 Φ2)) +
            ηt θl (8 + Φ1 + 5 Φ2 - 2 μ2 (-6 + 5 Φ2) + 2 μ1 (33 + 7 Φ2))) +
          η^3 (2 + 30 μ1 + 70 ηt μ1 + 36 μ2 + 10 ηt μ2 + (-1 + ηt) θl
              (18 + 4 Φ1 + μ2 (26 + 3 Φ1 - 19 Φ2) + 4 Φ2 + μ1 (48 - 19 Φ1 + 7 Φ2))) + η
          (-θl (2 × (1 + μ1) Φ1 + μ2 (2 + 3 Φ1 + Φ2)) + ηt (-8 + 2 θl Φ1 +
              2 μ1 (-7 + θl Φ1) + μ2 (4 + θl (2 + 3 Φ1 + Φ2)))) +
      x^2 (-1 + η)^2 (-2 × (-1 + η) θp (120 η^5 + ηt (-7 - 8 μ1 + μ2) -
            5 η^4 (-23 + 12 ηt - 33 μ1 + 28 μ2) +
            η (30 + 30 μ1 + 44 μ2 + ηt (-9 - 20 μ1 + 3 μ2)) +
            6 η^2 (11 + 25 μ1 + 34 μ2 + ηt (-2 + 20 μ1 + 7 μ2)) +
            η^3 (4 × (7 + 65 μ1 - 5 μ2) + ηt (-80 + 84 μ1 + 70 μ2))) + (-1 + ηt) θl
          (120 η^5 θp + 2 × (3 + 3 μ1 + μ2) - θp (6 + Φ1 + 3 Φ2 + 2 μ2 (2 + Φ2) +
              μ1 (6 + Φ1 + 3 Φ2)) - 2 η^3 (8 + 72 μ1 + θp (-24 - 68 μ2 -
                5 Φ1 + μ1 (-286 + 22 Φ1 - 48 Φ2) - 25 Φ2 + 50 μ2 Φ2)) +
            2 η^4 (-56 μ1 + 5 θp (7 + 3 Φ2 + 7 μ1 (5 + Φ1 + Φ2))) +
            η (2 × (17 + 23 μ1 + μ2) + θp (μ2 (32 + 6 Φ1 - 36 Φ2) +
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                    3 × (4 + Φ1 - 3 Φ2) - 6 μ1 (-3 + 6 Φ1 + Φ2))) +
                η^2 (24 + 92 μ1 + 3 θp (μ2 (54 + 3 Φ1 - 41 Φ2) + 5 × (6 + Φ1 + Φ2) +
                    μ1 (88 - 42 Φ1 + 10 Φ2)))) ) -
            x^3 (-1 + η)^3 (- ((-1 + η) θp (320 η^4 + ηt (-7 - 13 μ1 + μ2) - 40 η^3
                    (-5 + 4 ηt - 11 μ1 + 7 μ2) + 4 × (5 + 5 μ1 + 8 μ2) +
                  8 η (11 + 25 μ1 + 36 μ2 + ηt (-2 + 16 μ1 + 7 μ2)) + 4 η^2
                    (2 × (3 + 65 μ1 + 5 μ2) + ηt (-40 + 28 μ1 + 35 μ2))) ) + (-1 + ηt) θl
              (20 + 160 η^4 θp + 4 μ2 + 8 θp μ2 - θp Φ1 + μ1 (24 + θp (4 - 13 Φ1 - 3 Φ2)) -
                5 θp Φ2 - 14 θp μ2 Φ2 - 2 η^2 (12 + 84 μ1 + θp (-16 - 72 μ2 -
                    5 Φ1 + μ1 (-264 + 33 Φ1 - 37 Φ2) - 25 Φ2 + 50 μ2 Φ2)) +
                2 η^3 (-84 μ1 + 5 θp (4 × (1 + Φ2) + 7 μ1 (6 + Φ1 + Φ2))) +
                η (27 + 91 μ1 + 3 μ2 + θp (54 + 7 Φ1 + μ2 (110 + 3 Φ1 - 85 Φ2) +
                    7 Φ2 + μ1 (168 - 88 Φ1 + 16 Φ2)))) ) +
            x^4 (-1 + η)^4 (-2 × (-1 + η) θp (11 + 120 η^3 + 25 μ1 + 38 μ2 + ηt
                    (-2 + 12 μ1 + 7 μ2) - 5 η^2 (-7 + 12 ηt - 33 μ1 + 14 μ2) +
                η (-2 + 130 μ1 + 30 μ2 + ηt (-40 + 14 μ1 + 35 μ2))) +
              (-1 + ηt) θl (120 η^3 θp + 2 × (5 + 15 μ1 + μ2) + θp
                    (12 + 28 μ2 + Φ1 + Φ2 - 22 μ2 Φ2 + μ1 (40 - 23 Φ1 + 3 Φ2)) +
                η^2 (-112 μ1 + 5 θp (-2 + 6 Φ2 + 7 μ1 (8 + Φ1 + Φ2))) +
                η (-16 × (1 + 5 μ1) + θp (8 + 76 μ2 + 5 Φ1 + 25 Φ2 -
                    50 μ2 Φ2 + μ1 (242 - 44 Φ1 + 26 Φ2)))) ) +
            x (-1 + η) × (96 η^7 θp + ηt θp (3 + 3 μ1 - μ2) - 4 η^6 θp (-7 - 12 θl +
                    12 ηt (1 + θl) - 33 μ1 + 35 μ2) + η^4
              (2 θp (22 - 30 μ1 + ηt (32 + 40 μ1 - 7 μ2) + 158 μ2) +
                (-1 + ηt) θl (4 + 44 μ1 + θp (-32 - 64 μ2 - 5 Φ1 +
                    μ1 (-308 + 11 Φ1 - 59 Φ2) - 25 Φ2 + 50 μ2 Φ2))) + η^2
              (θp (ηt (-7 + 11 μ1 + μ2) - 20 × (3 + 3 μ1 + 4 μ2)) + (-1 + ηt)
                θl (2 × (-7 - 11 μ1 + μ2) + θp (-2 μ2 (20 + 6 Φ1 - 15 Φ2) +
                    3 × (-8 - 3 Φ1 + Φ2) + 3 μ1 (-8 + 11 Φ1 + Φ2)))) + η^3
              (-θp (4 × (7 + 35 μ1 + 44 μ2) + ηt (-1 + 233 μ1 + 47 μ2)) +
                (-1 + ηt) θl (-7 - 31 μ1 + μ2 - θp (66 + 13 Φ1 + μ2 (106 + 9 Φ1 - 79 Φ2) +
                    13 Φ2 + μ1 (184 - 80 Φ1 + 24 Φ2)))) + η
              (ηt θp (19 + 27 μ1 - 9 μ2) - (-1 + ηt) θl (3 + 3 μ1 - μ2 +
                  θp (-6 + Φ1 + μ2 (-2 + 3 Φ1 - Φ2) - 3 Φ2 + μ1 (Φ1 - 3 × (2 + Φ2))))) +
            η^5 (28 × (-1 + ηt) θl μ1 + θp (16 × (-5 + 8 μ1 + 5 μ2) + θl
                  (44 + 12 Φ2 + 7 μ1 (22 + 5 Φ1 + 5 Φ2)) - ηt (32 - 112 μ1 -
                    70 μ2 + θl (44 + 12 Φ2 + 7 μ1 (22 + 5 Φ1 + 5 Φ2)))))))))) /
  (192 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
    (w +
      x +
      η -
      w η -
      x η)^3 (-1 + ηt) θp))

βcσ = - ((cσ (-8 × (-1 + w (-1 + η)) (x (-1 + η) - η)^3 (w (-1 + η) + x (-1 + η) - η)
        (-1 + ηt) θp (3 (cv^2 - 4 ϵ) (1 + w - w η)^2 (w + x + η - w η - x η)^2 +
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2 cσ^2 (-1 + η) × (-5 x - 4 x^2 - 5 η - 3 x η + 8 x^2 η - 4 η^2 + 8 x η^2 - 4 x^2 η^2 - 4 x μ1 +
    2 x^2 μ1 - 4 η μ1 + 8 x η μ1 - 3 x^2 η μ1 + 2 η^2 μ1 - 2 x η^2 μ1 + η^3 μ1 - 2 x η^3 μ1 +
    x^2 η^3 μ1 + x μ1^2 - 3 x^2 μ1^2 + η μ1^2 - 7 x η μ1^2 + 7 x^2 η μ1^2 - 3 η^2 μ1^2 +
    8 x η^2 μ1^2 - 5 x^2 η^2 μ1^2 + η^3 μ1^2 - 2 x η^3 μ1^2 + x^2 η^3 μ1^2 - 2 x μ2 - η μ2 +
    2 x η μ2 - 8 x μ1 μ2 - 13 η μ1 μ2 + 8 x η μ1 μ2 + 9 w^3 (-1 + η)^3 (1 + 2 μ1 μ2) +
    w (-1 + η) × (5 + x^2 (-1 + η)^2 (-2 + μ1)^2 + 4 μ1 - μ1^2 - η^2 (-4 + 6 μ1 + μ1^2) +
        18 μ1 μ2 + 2 x (-1 + η) × (-9 - 2 μ1 - 2 μ1^2 + η (-4 + 5 μ1) -
            2 μ2 - 8 μ1 μ2) + 2 η (9 + 2 μ1 + 2 μ1^2 + μ2 + 13 μ1 μ2)) +
    w^2 (-1 + η)^2 (-14 - 6 μ1 - μ1^2 - 36 μ1 μ2 - η (13 - 5 μ1 + μ2 + 13 μ1 μ2) +
        x (-1 + η) × (13 + μ1^2 + 2 μ2 + μ1 (-4 + 8 μ2)))))) +
f (-16 w^6 (-1 + η)^6 (x + η - x η)^3 (-1 + ηt) θl θp (-4 + Φ2) +
    (x + η - x η)^2 (-4 x^4 (-1 + η)^4 θp (-48 + 30 η^4 + 64 θl -
            2 η^3 (39 - 5 θl + 5 ηt (2 + θl)) + 4 θl Φ2 + ηt (9 - 4 θl (16 + Φ2)) +
            η^2 (18 - 19 θl + 2 θl Φ2 + ηt (49 + 19 θl - 2 θl Φ2)) +
            η (78 - 39 θl - 10 θl Φ2 + ηt (-38 + 39 θl + 10 θl Φ2))) - x^2 (-1 + η)^2
        (720 η^6 θp - 22 ηt θp - 48 η^5 (39 - 5 θl + 5 ηt (2 + θl)) θp + η^2 (2 × (-576 +
                97 ηt) θp + (-1 + ηt) θl (-84 + θp (-1430 + 141 Φ1 - 43 Φ2))) -
            24 η^4 θp (-18 + 19 θl - 2 θl Φ2 + ηt (-49 - 19 θl + 2 θl Φ2)) +
            24 η^3 θp (78 - 39 θl - 10 θl Φ2 + ηt (-38 + 39 θl + 10 θl Φ2)) +
            η (44 ηt θp - (-1 + ηt) θl (-84 + 141 θp Φ1 + 53 θp (2 + Φ2)))) +
    16 x^3 (-1 + η)^3 ((-1 + η)^2 η (-48 + 30 η^2 + 9 ηt - 2 η (9 + 10 ηt)) θp -
            (-1 + ηt) θl (-2 + 10 η^4 θp + θp (2 + 3 Φ1 + Φ2) + η^3 θp (-19 + 2 Φ2) -
                η^2 θp (39 + 10 Φ2) + η (2 + θp (62 - 3 Φ1 + 3 Φ2)))) +
    η^2 θp (-120 η^6 + 30 ηt + 8 η^5 (39 - 5 θl + 5 ηt (2 + θl)) +
            3 η (-20 ηt - 13 θl Φ1 - 5 θl (2 + Φ2) + ηt θl (13 Φ1 + 5 × (2 + Φ2))) +
            η^2 (192 + θl (-226 + 39 Φ1 - Φ2) + ηt (-6 + θl (226 - 39 Φ1 + Φ2))) +
            4 η^4 (-18 + θl (19 - 2 Φ2) + ηt (-49 + θl (-19 + 2 Φ2))) -
            4 η^3 (78 - θl (39 + 10 Φ2) + ηt (-38 + θl (39 + 10 Φ2)))) +
    4 x (-1 + η) η (120 η^6 θp - 22 ηt θp - 8 η^5 (39 - 5 θl + 5 ηt (2 + θl)) θp +
            η^2 (2 × (-96 + 7 ηt) θp + (-1 + ηt) θl (-4 + θp (-230 + 33 Φ1 - 3 Φ2))) +
            4 η^4 θp (18 + ηt (49 + θl (19 - 2 Φ2)) + θl (-19 + 2 Φ2)) +
            η (44 ηt θp - (-1 + ηt) θl (-4 + 33 θp Φ1 + 13 θp (2 + Φ2))) +
            4 η^3 θp (78 - θl (39 + 10 Φ2) + ηt (-38 + θl (39 + 10 Φ2)))) +
    w (x (-1 + η) - η) (-1 + η) × (4 x^4 (-1 + η)^4 (-(-1 + η)^2 θp (150 η^3 +
                η^2 (255 - 150 ηt) + 9 × (-16 + 3 ηt) - 2 η (437 + 35 ηt - 70 μ1)) +
            (-1 + ηt) θl (-24 + 24 η + 36 θp Φ1 + 4 η^2 θp (-258 + 35 μ1 - 16 Φ2) +
                24 θp (9 + Φ2) + 5 η^3 θp (37 + 2 Φ2) -
                η θp (-919 + 140 μ1 + 36 Φ1 + 42 Φ2))) + 4 x^5 (-1 + η)^5
        θp (30 η^4 - 3 η^3 (9 + 10 ηt) - 4 × (41 - 7 μ1 + θl (-53 + 7 μ1)) +
            ηt (-2 + 4 θl (-53 + 7 μ1)) + η^2 (-200 + 31 θl + 28 μ1 +
                2 θl Φ2 + ηt (58 - θl (31 + 2 Φ2))) + η (361 - 56 μ1 +
                θl (-195 + 28 μ1 - 14 Φ2) + ηt (-26 + θl (195 - 28 μ1 + 14 Φ2)))) -
    η^2 θp (120 η^7 + η^6 (252 - 120 ηt) + 10 ηt (-17 + 8 μ1) - 4 η^4 (-415 + 56
                μ1 + ηt (-121 + 4 θl (-63 + 7 μ1 - 2 Φ2)) + θl (252 - 28 μ1 + 8 Φ2)) +
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        η^2 (-576 + 118 ηt + 80 ηt μ1 + 8 θl (86 - Φ1 + Φ2 + 5 μ1 (2 + Φ1 + Φ2)) -
            8 ηt θl (86 - Φ1 + Φ2 + 5 μ1 (2 + Φ1 + Φ2))) -
        4 η^5 (434 - 28 μ1 - θl (61 + 2 Φ2) + ηt (2 + θl (61 + 2 Φ2))) +
        η^3 (56 × (5 + 2 μ1) - θl (-290 + 112 μ1 + 117 Φ1 + 165 Φ2) +
            ηt (-554 + θl (-290 + 112 μ1 + 117 Φ1 + 165 Φ2))) +
        5 η (θl (25 Φ1 + 17 × (2 + Φ2) - 8 μ1 (2 + Φ1 + Φ2)) +
            ηt (50 - 32 μ1 + θl (-25 Φ1 - 17 × (2 + Φ2) + 8 μ1 (2 + Φ1 + Φ2))))) +
    x^3 (-1 + η)^3 (2 (-1 + η)^2 θp (600 η^4 - 33 ηt + 72 η (-16 + 3 ηt) -
            60 η^3 (-23 + 10 ηt) - 8 η^2 (464 + 65 ηt - 70 μ1)) - (-1 + ηt)
          θl (8 η^3 θp (-1089 + 140 μ1 - 58 Φ2) + 40 η^4 θp (43 + 2 Φ2) +
            η^2 (348 - θp (-6194 + 1120 μ1 + 567 Φ1 + 687 Φ2)) - 8 × (26 - 10 μ1 +
                θp (-19 Φ1 - 13 × (2 + Φ2) + 5 μ1 (2 + Φ1 + Φ2))) + η (-20 × (7 +
                    4 μ1) + θp (3278 + 415 Φ1 + 295 Φ2 + 40 μ1 (2 + Φ1 + Φ2))))) +
    x (-1 + η) η (600 η^7 θp - 300 η^6 (-3 + 2 ηt) θp + 2 ηt θp (-209 + 80 μ1) -
        4 η^4 θp (-2021 + 280 μ1 + ηt (-458 + θl (-1203 + 140 μ1 - 46 Φ2)) + θl
                (1203 - 140 μ1 + 46 Φ2)) - 4 η^5 θp (1936 - 140 μ1 - 5 θl (55 + 2 Φ2) +
            5 ηt (-10 + θl (55 + 2 Φ2))) + η^3 (2 θp (232 - 1109 ηt + 280 μ1) +
            (-1 + ηt) θl (-48 + θp (-1966 + 560 μ1 + 513 Φ1 + 681 Φ2))) +
        2 η (ηt θp (241 - 160 μ1) + (-1 + ηt) θl (65 - 40 μ1 +
                θp (-201 Φ1 - 137 × (2 + Φ2) + 60 μ1 (2 + Φ1 + Φ2)))) +
        η^2 (2 θp (-1152 + ηt (361 + 80 μ1)) - (-1 + ηt) θl
                (82 - 80 μ1 + θp (2926 + 111 Φ1 + 119 Φ2 + 120 μ1 (2 + Φ1 + Φ2))))) -
    x^2 (-1 + η)^2 (1200 η^7 θp - 120 η^6 (-9 + 10 ηt) θp + 4 ηt θp (-53 + 20 μ1) -
        8 η^4 θp (7 × (-281 + 40 μ1) + ηt (-311 + 2 θl (-573 + 70 μ1 - 26 Φ2)) + θl
                (1146 - 140 μ1 + 52 Φ2)) - 8 η^5 θp (1702 - 140 μ1 - 5 θl (49 + 2 Φ2) +
            5 ηt (-22 + θl (49 + 2 Φ2))) + η^3 (-2 θp (472 + 1573 ηt - 560 μ1) +
            (-1 + ηt) θl (-300 + θp (-5042 + 1120 μ1 + 819 Φ1 + 1035 Φ2))) -
        2 η^2 (-4 θp (-432 + ηt (137 + 10 μ1)) + (-1 + ηt) θl
                (37 - 80 μ1 + θp (2326 + 195 Φ1 + 155 Φ2 + 60 μ1 (2 + Φ1 + Φ2)))) +
        η (2 ηt θp (47 - 80 μ1) + (-1 + ηt) θl (374 - 160 μ1 +
                θp (-429 Φ1 - 293 × (2 + Φ2) + 120 μ1 (2 + Φ1 + Φ2))))) +
w^2 (-1 + η)^2 (-4 x^6 (-1 + η)^6 θp (-76 + 10 η^4 - 11 ηt - η^3 (9 + 10 ηt) +
        28 μ1 + η^2 (-88 + 9 ηt + 28 μ1) -
        4 θl (-31 + 7 μ1 + 2 Φ2) + 4 ηt θl (-31 + 7 μ1 + 2 Φ2) +
        η (163 - 56 μ1 + 4 θl (-19 + 7 μ1 - Φ2) + 4 ηt (3 + θl (19 - 7 μ1 + Φ2)))) +
    12 x^5 (-1 + η)^5 ((-1 + η)^2 θp (20 η^3 + η^2 (52 - 20 ηt) -
            2 × (82 + ηt - 14 μ1) + η (-119 - 52 ηt + 56 μ1)) - (-1 + ηt) θl
          (-8 + η^2 θp (-121 + 56 μ1 - 6 Φ2) + 4 θp (55 - 7 μ1 + 3 Φ1 + Φ2) +
            η (8 - θp (-45 + 28 μ1 + 12 Φ1 + 34 Φ2)))) -
    x^3 (-1 + η)^3 (-4 (-1 + η)^2 θp (200 η^5 + 9 η (-64 + ηt) - 40 η^4
                (-28 + 5 ηt) - 12 η^2 (428 + 25 ηt - 70 μ1) -
            10 η^3 (17 + 112 ηt - 56 μ1) + 3 ηt (-53 + 20 μ1)) +
        (-1 + ηt) θl (2 η^3 (324 + θp (-7718 + 560 μ1 - 693 Φ1 - 1373 Φ2)) +
            40 η^4 θp (-47 + 56 μ1 - 2 Φ2) - 8 × (16 - 10 μ1 + 5 θp μ1 (2 + Φ1 + Φ2) -
                2 θp (8 + 5 Φ1 + 4 Φ2)) + 3 η^2 (366 - 240 μ1 +
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            θp (7410 - 119 Φ1 - 383 Φ2 + 160 μ1 (-5 + Φ1 + Φ2))) + η (-1618 +
            640 μ1 + θp (5326 + 1663 Φ1 + 1319 Φ2 - 440 μ1 (2 + Φ1 + Φ2)))) ) +
    3 x^4 (-1 + η)^4 (-2 (-1 + η)^2 θp (-96 + 100 η^4 + η^3 (410 - 100 ηt) +
          7 ηt - 4 η (419 + 15 ηt - 70 μ1) - 10 η^2 (37 + 41 ηt - 28 μ1)) +
        (-1 + ηt) θl (20 η^3 θp (-43 + 28 μ1 - 2 Φ2) -
          η^2 (-148 + θp (1666 + 237 Φ1 + 517 Φ2)) +
          η (60 - 80 μ1 + θp (4046 + 85 Φ1 - 59 Φ2 + 40 μ1 (-12 + Φ1 + Φ2))) -
          8 × (26 - 10 μ1 + θp (-58 - 19 Φ1 - 15 Φ2 + 5 μ1 (2 + Φ1 + Φ2)))) ) +
    x (-1 + η) η (240 η^8 θp - 48 η^7 (-33 + 5 ηt) θp - 12 η^6 θp
         (191 + 132 ηt - 56 μ1) + 2 ηt θp (-141 + 80 μ1) -
        6 η^4 (-2 θp (1725 + 7 ηt - 224 μ1) + (-1 + ηt) θl
            (8 + θp (-1688 + 168 μ1 - 105 Φ1 - 197 Φ2))) - 12 η^5 θp (986 -
          28 μ1 - θl (43 + 56 μ1 + 2 Φ2) + ηt (-234 + θl (43 + 56 μ1 + 2 Φ2))) +
        2 η (200 ηt θp (-3 + μ1) + (-1 + ηt) θl (51 - 40 μ1 +
            60 θp μ1 (2 + Φ1 + Φ2) - 24 θp (8 + 5 Φ1 + 4 Φ2))) +
        η^2 (-2 θp (1152 + ηt (-1617 + 640 μ1)) + (-1 + ηt) θl (32 × (9 - 5 μ1) +
            3 θp (-1614 - 447 Φ1 - 359 Φ2 + 120 μ1 (2 + Φ1 + Φ2)))) -
        3 η^3 (4 θp (508 + ηt (235 - 60 μ1) - 140 μ1) + (-1 + ηt) θl (114 -
            80 μ1 + θp (3062 - 317 Φ1 - 437 Φ2 + 80 μ1 (-3 + 2 Φ1 + 2 Φ2)))) ) -
    x^2 (-1 + η)^2 (600 η^8 θp - 60 η^7 (-51 + 10 ηt) θp - 60 η^6 θp
         (106 + 51 ηt - 28 μ1) + 2 ηt θp (-71 + 40 μ1) -
        12 η^5 θp (1653 + θl (10 - 140 μ1) + 10 ηt (-52 + θl (-1 + 14 μ1))) -
        12 η^4 (2 θp (-1669 + 39 ηt + 210 μ1) + (-1 + ηt) θl
            (29 + θp (-1530 + 140 μ1 - 111 Φ1 - 211 Φ2))) +
        2 η (ηt θp (-803 + 280 μ1) + (-1 + ηt) θl (121 - 80 μ1 +
            60 θp μ1 (2 + Φ1 + Φ2) - 24 θp (8 + 5 Φ1 + 4 Φ2))) +
        η^2 (-2 θp (1728 + ηt (-1801 + 680 μ1)) + (-1 + ηt) θl (1270 -
            560 μ1 + 3 θp (-2542 - 751 Φ1 - 599 Φ2 + 200 μ1 (2 + Φ1 + Φ2)))) -
        3 η^3 (2 θp (2344 + ηt (583 - 120 μ1) - 560 μ1) + (-1 + ηt) θl (388 - 240
             μ1 + θp (6754 - 387 Φ1 - 635 Φ2 + 80 μ1 (-8 + 3 Φ1 + 3 Φ2)))) ) +
    η^2 θp (-40 η^8 + 4 η^7 (-81 + 10 ηt) + 4 η^6 (79 + 81 ηt - 28 μ1) +
        16 ηt (8 - 5 μ1) + η^4 (-4244 + 560 μ1 +
          ηt (-142 + θl (-2162 + 224 μ1 - 117 Φ1 - 221 Φ2)) +
          θl (2162 - 224 μ1 + 117 Φ1 + 221 Φ2)) + 4 η^5 (671 - 28 μ1 -
          θl (47 + 28 μ1 + 2 Φ2) + ηt (-126 + θl (47 + 28 μ1 + 2 Φ2))) -
        2 η (4 θl (-5 μ1 (2 + Φ1 + Φ2) + 2 × (8 + 5 Φ1 + 4 Φ2)) +
          ηt (-127 + 40 μ1 + 20 θl μ1 (2 + Φ1 + Φ2) - 8 θl (8 + 5 Φ1 + 4 Φ2))) +
        η^2 (576 + θl (-1150 - 295 Φ1 - 239 Φ2 + 80 μ1 (2 + Φ1 + Φ2)) +
          ηt (-910 + 400 μ1 + θl (1150 + 295 Φ1 + 239 Φ2 -
                80 μ1 (2 + Φ1 + Φ2)))) + 6 η^3 (172 - 56 μ1 +
          θl (-276 + 43 Φ1 + 55 Φ2 - 4 μ1 (-4 + 5 Φ1 + 5 Φ2)) + ηt (135 -
            40 μ1 + θl (276 - 43 Φ1 - 55 Φ2 + 4 μ1 (-4 + 5 Φ1 + 5 Φ2)))) ) +
2 w^5 (-1 + η)^5 (24 x^4 (-1 + η)^4 (-1 + ηt) θl θp (-4 + Φ2) +
    2 η^2 θp (10 η^5 - η^4 (9 + 10 ηt) + 4 ηt (-8 + 5 μ1) +
        η^3 (-88 + 9 ηt + 28 μ1) + η^2 (163 + 20 ηt (-1 + μ1) - 56 μ1 +
          2 θl μ1 (24 + 5 Φ1 + 5 Φ2) - 2 ηt θl μ1 (24 + 5 Φ1 + 5 Φ2) -
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            4 θl (15 + 5 Φ1 + 8 Φ2) + 4 ηt θl (15 + 5 Φ1 + 8 Φ2)) +
        η (-76 + 28 μ1 + 2 θl (78 + 10 Φ1 + 4 Φ2 - μ1 (24 + 5 Φ1 + 5 Φ2)) + ηt
            (53 - 40 μ1 - 4 θl (39 + 5 Φ1 + 2 Φ2) + 2 θl μ1 (24 + 5 Φ1 + 5 Φ2)))) +
    2 x^3 (-1 + η)^3 (-(-1 + η)^2 θp (-76 + 10 η^2 + η (11 - 10 ηt) -
            11 ηt + 28 μ1) + 2 × (-1 + ηt) θl
          (2 × (-8 + 5 μ1) + θp (78 + 10 Φ1 + 4 Φ2 - μ1 (24 + 5 Φ1 + 5 Φ2)) +
            η (16 - 10 μ1 + θp (42 - 10 Φ1 - 34 Φ2 + μ1 (24 + 5 Φ1 + 5 Φ2))))) -
    x (-1 + η) η (60 η^5 θp - 6 η^4 (9 + 10 ηt) θp + 6 η^3 θp
          (-88 + 9 ηt + 28 μ1) + ηt θp (-141 + 80 μ1) +
        η (-8 θp (57 - 21 μ1 + ηt (-27 + 20 μ1)) + (-1 + ηt) θl (51 -
                40 μ1 + 12 θp (-2 × (39 + 5 Φ1 + 2 Φ2) + μ1 (24 + 5 Φ1 + 5 Φ2)))) +
        η^2 (θp (978 - 336 μ1 + ηt (-69 + 80 μ1)) - (-1 + ηt) θl (51 -
                40 μ1 + 12 θp (μ1 (24 + 5 Φ1 + 5 Φ2) - 2 × (11 + 5 Φ1 + 9 Φ2))))) +
    x^2 (-1 + η)^2 (60 η^5 θp - 6 η^4 (9 + 10 ηt) θp + 6 η^3 θp (-88 +
            9 ηt + 28 μ1) + ηt θp (-71 + 40 μ1) +
        η (4 θp (-114 + 19 ηt + 42 μ1 - 20 ηt μ1) + (-1 + ηt) θl (121 -
                80 μ1 + 12 θp (-2 × (39 + 5 Φ1 + 2 Φ2) + μ1 (24 + 5 Φ1 + 5 Φ2)))) +
        η^2 (θp (978 + ηt - 336 μ1 + 40 ηt μ1) - (-1 + ηt) θl (121 -
                80 μ1 + 12 θp (μ1 (24 + 5 Φ1 + 5 Φ2) - 2 × (3 + 5 Φ1 + 11 Φ2))))) -
w^3 (-1 + η)^3 (4 x^5 (-1 + η)^5 (3 (-1 + η)^2 θp (-76 + 10 η^2 + η (11 - 10 ηt) -
            11 ηt + 28 μ1) - 4 × (-1 + ηt) θl (-2 + η (2 +
                θp (-35 + 21 μ1 - 3 Φ1 - 10 Φ2)) + θp (95 - 21 μ1 + 3 Φ1 - 5 Φ2)) -
    16 x^6 (-1 + η)^6 (-1 + ηt) θl θp (-4 + Φ2) + η^2 θp (-120 η^7 +
        12 η^6 (-21 + 10 ηt) + 48 ηt (8 - 5 μ1) + 84 η^5 (15 + 3 ηt - 4 μ1) +
        η^4 (84 × (9 + 4 μ1) + ηt (-730 + θl (-466 + 336 μ1 - 39 Φ1 - 55 Φ2)) +
            θl (466 - 336 μ1 + 39 Φ1 + 55 Φ2)) -
        2 η (-96 - 60 θl μ1 (2 + Φ1 + Φ2) + 8 θl (40 + 15 Φ1 + 13 Φ2) + ηt
                (147 - 120 μ1 + 60 θl μ1 (2 + Φ1 + Φ2) - 8 θl (40 + 15 Φ1 + 13 Φ2))) +
        η^2 (1656 - 336 μ1 + θl (-2514 + 336 μ1 - 135 Φ1 - 23 Φ2) +
            ηt (-430 + 240 μ1 + θl (2514 - 336 μ1 + 135 Φ1 + 23 Φ2))) +
        2 η^3 (-1746 + 168 μ1 - 60 θl μ1 (2 + Φ1 + Φ2) + 8 θl
                (88 + 21 Φ1 + 31 Φ2) + ηt (349 - 120 μ1 +
                60 θl μ1 (2 + Φ1 + Φ2) - 8 θl (88 + 21 Φ1 + 31 Φ2)))) +
    x^4 (-1 + η)^4 (-2 (-1 + η)^2 θp (-984 + 300 η^3 + η^2 (510 - 300 ηt) -
            23 ηt - 6 η (347 + 85 ηt - 140 μ1) + 168 μ1) + (-1 + ηt) θl
          (η^2 (148 + θp (-3398 + 1680 μ1 - 237 Φ1 - 541 Φ2)) + η (476 - 240 μ1 +
                θp (4646 - 219 Φ1 - 875 Φ2 + 24 μ1 (-46 + 5 Φ1 + 5 Φ2))) - 24 ×
            (26 - 10 μ1 + θp (-132 - 19 Φ1 - 13 Φ2 + μ1 (24 + 5 Φ1 + 5 Φ2))))) +
    x (-1 + η) η (600 η^7 θp - 300 η^6 (-3 + 2 ηt) θp - 12 η^5 θp
          (518 + 75 ηt - 140 μ1) + 6 ηt θp (-141 + 80 μ1) -
        2 η^4 (2 θp (-779 ηt + 63 × (3 + 8 μ1)) + (-1 + ηt) θl
            (8 + θp (-1366 + 840 μ1 - 105 Φ1 - 161 Φ2))) +
        6 η (-2 θp (48 + ηt (-3 + 20 μ1)) + (-1 + ηt) θl (51 - 40 μ1 +
                60 θp μ1 (2 + Φ1 + Φ2) - 8 θp (40 + 15 Φ1 + 13 Φ2))) +
        η^2 (2 θp (-3468 + ηt (991 - 480 μ1) + 672 μ1) + 3 × (-1 + ηt)
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            θl (28 + θp (-3570 - 287 Φ1 - 127 Φ2 + 8 μ1 (66 + 5 Φ1 + 5 Φ2)))) +
        η^3 (4 θp (3246 - 252 μ1 + ηt (-697 + 180 μ1)) - (-1 + ηt)
            θl (374 - 240 μ1 + θp (-4138 - 1371 Φ1 - 2123 Φ2 +
                48 μ1 (13 + 10 Φ1 + 10 Φ2)))) - x^2 (-1 + η)^2 (1200 η^7 θp -
        120 η^6 (-9 + 10 ηt) θp - 24 η^5 θp (506 + 45 ηt - 140 μ1) +
        6 ηt θp (-71 + 40 μ1) - 4 η^4 (-3 θp (352 + 429 ηt - 392 μ1) +
            (-1 + ηt) θl (29 + θp (-1538 + 840 μ1 - 111 Φ1 - 187 Φ2))) +
        6 η (θp (-96 + 5 ηt (-31 + 8 μ1)) + (-1 + ηt) θl (121 - 80 μ1 +
              60 θp μ1 (2 + Φ1 + Φ2) - 8 θp (40 + 15 Φ1 + 13 Φ2))) +
        3 η^2 (2 θp (-1812 + ηt (421 - 200 μ1) + 336 μ1) + (-1 + ηt) θl (262 -
              80 μ1 + θp (-5682 - 591 Φ1 - 335 Φ2 + 24 μ1 (38 + 5 Φ1 + 5 Φ2)))) +
        η^3 (6 θp (2848 - 112 μ1 + ηt (-673 + 120 μ1)) - (-1 + ηt)
            θl (1396 - 720 μ1 + θp (-2446 - 2049 Φ1 -
                3473 Φ2 + 48 μ1 (2 + 15 Φ1 + 15 Φ2)))) +
    x^3 (-1 + η)^3 (4 (-1 + η)^2 θp (-48 + 300 η^4 + η^3 (690 - 300 ηt) -
            6 η^2 (309 + 115 ηt - 140 μ1) + 30 ηt (-5 + 2 μ1) +
            η (-1986 - 77 ηt + 336 μ1)) - (-1 + ηt) θl
          (η^3 (216 + θp (-6660 + 3360 μ1 - 462 Φ1 - 878 Φ2)) -
            8 × (48 - 30 μ1 + 15 θp μ1 (2 + Φ1 + Φ2) - 2 θp (40 + 15 Φ1 + 13 Φ2)) +
            η^2 (90 × (17 - 8 μ1) + θp (3410 - 1281 Φ1 - 2641 Φ2 +
                96 μ1 (-11 + 5 Φ1 + 5 Φ2))) + η (6 × (-227 + 80 μ1) + θp
              (12 018 + 1503 Φ1 + 959 Φ2 - 24 μ1 (86 + 15 Φ1 + 15 Φ2))))) -
w^4 (-1 + η)^4 (-48 x^5 (-1 + η)^5 (-1 + ηt) θl θp (-4 + Φ2) + 4 x^4 (-1 + η)^4
      (3 (-1 + η)^2 θp (-76 + 10 η^2 + η (11 - 10 ηt) - 11 ηt + 28 μ1) - 2 × (-1 + ηt)
          θl (-26 + 10 μ1 + θp (212 + 19 Φ1 + Φ2 - μ1 (52 + 5 Φ1 + 5 Φ2)) +
            η (26 - 10 μ1 + θp (-20 - 19 Φ1 - 49 Φ2 + μ1 (52 + 5 Φ1 + 5 Φ2)))) +
    3 x^2 (-1 + η)^2 (240 η^6 θp - 48 η^5 (2 + 5 ηt) θp + 2 ηt θp
          (-71 + 40 μ1) + 12 η^4 θp (-185 + 8 ηt + 56 μ1) +
        2 η (θp (-328 + 33 ηt + 56 μ1 - 40 ηt μ1) + (-1 + ηt) θl (121 -
              80 μ1 - 8 θp (77 + 15 Φ1 + 12 Φ2) + 4 θp μ1 (44 + 15 Φ1 + 15 Φ2))) -
        η^2 (2 θp (190 - 224 μ1 + 5 ηt (9 + 8 μ1)) + (-1 + ηt) θl
              (74 - 80 μ1 + θp (2190 + 37 Φ1 - 251 Φ2 + 40 μ1 (-12 + Φ1 + Φ2)))) +
        η^3 (2 θp (1556 - 616 μ1 + 5 ηt (31 + 8 μ1)) - (-1 + ηt) θl (168 - 80
                μ1 + θp (-1438 - 277 Φ1 - 437 Φ2 + 16 μ1 (52 + 5 Φ1 + 5 Φ2)))) +
    x^3 (-1 + η)^3 (-4 (-1 + η)^2 θp (-164 + 120 η^3 - 55 ηt - 6 η^2
              (-27 + 20 ηt) - 3 η (293 + 54 ηt - 112 μ1) + 28 μ1 + 20 ηt μ1) +
        (-1 + ηt) θl (-8 × (48 - 30 μ1 - 2 θp (77 + 15 Φ1 + 12 Φ2) +
                θp μ1 (44 + 15 Φ1 + 15 Φ2)) + η^2 (582 - 240 μ1 +
                θp (-2398 - 581 Φ1 - 1061 Φ2 + 32 μ1 (52 + 5 Φ1 + 5 Φ2))) -
            η (198 + θp (-5582 - 341 Φ1 + 235 Φ2 + 8 μ1 (164 + 5 Φ1 + 5 Φ2))))) +
    η^2 θp (120 η^6 + η^5 (12 - 120 ηt) - 12 η^4 (97 + ηt - 28 μ1) +
        48 ηt (-8 + 5 μ1) + η^2 (28 × (19 + 4 μ1) + θl (494 - 115 Φ1 -
                259 Φ2 + 16 μ1 (-4 + 5 Φ1 + 5 Φ2)) + ηt (40 × (-7 + 2 μ1) +
                θl (-494 + 115 Φ1 + 259 Φ2 - 16 μ1 (-4 + 5 Φ1 + 5 Φ2)))) +
        η^3 (1156 - 560 μ1 + θl (-766 - 125 Φ1 - 173 Φ2 + 8 μ1
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$$(52 + 5\,\Phi1 + 5\,\Phi2)) + \eta t\,(206 + 80\,\mu1 +$$
$$\theta l\,(766 + 125\,\Phi1 + 173\,\Phi2 - 8\,\mu1\,(52 + 5\,\Phi1 + 5\,\Phi2)))) +$$
$$2\,\eta\,(\eta t\,(295 - 200\,\mu1 - 8\,\theta l\,(77 + 15\,\Phi1 + 12\,\Phi2) + 4\,\theta l\,\mu1$$
$$(44 + 15\,\Phi1 + 15\,\Phi2)) + 4 \times (-82 + 14\,\mu1 +$$
$$\theta l\,(154 + 30\,\Phi1 + 24\,\Phi2 - \mu1\,(44 + 15\,\Phi1 + 15\,\Phi2))))) -$$
$$x\,(-1 + \eta)\,\eta\,(480\,\eta^6\,\theta p - 24\,\eta^5\,(3 + 20\,\eta t)\,\theta p + 6\,\eta t\,\theta p$$
$$(-141 + 80\,\mu1) + 12\,\eta^4\,\theta p\,(-379 + 6\,\eta t + 112\,\mu1) +$$
$$6\,\eta\,(4\,\theta p\,(-82 + \eta t\,(45 - 30\,\mu1) + 14\,\mu1) + (-1 + \eta t)\,\theta l\,(51 - 40\,\mu1 -$$
$$8\,\theta p\,(77 + 15\,\Phi1 + 12\,\Phi2) + 4\,\theta p\,\mu1\,(44 + 15\,\Phi1 + 15\,\Phi2))) +$$
$$\eta^3\,(12\,\theta p\,(452 - 196\,\mu1 + \eta t\,(57 + 20\,\mu1)) - (-1 + \eta t)\,\theta l\,(130 -$$
$$80\,\mu1 + \theta p\,(-3034 - 527\,\Phi1 - 767\,\Phi2 + 32\,\mu1\,(52 + 5\,\Phi1 + 5\,\Phi2)))) +$$
$$\eta^2\,(6\,\theta p\,(114 - 85\,\eta t + 112\,\mu1) - (-1 + \eta t)\,\theta l\,(176 - 160\,\mu1 +$$
$$\theta p\,(3178 - 193\,\Phi1 - 769\,\Phi2 + 8\,\mu1\,(-76 + 25\,\Phi1 + 25\,\Phi2))))))))) /$$
$$(192\,(-1 + w\,(-1 + \eta))^3\,(x\,(-1 + \eta) - \eta)^3\,(w + x + \eta - w\,\eta - x\,\eta)^3$$
$$(-1 +$$
$$\eta t)\,\theta p))$$

$$\beta f = \frac{1}{96}\,f\,\Bigg(-24\,c v^2 + 96\,\epsilon + \frac{112\,f\,w}{(-1 + w\,(-1 + \eta))^3} +$$
$$\frac{40\,c\sigma^2}{(-1 + w\,(-1 + \eta))\,(x\,(-1 + \eta) - \eta)\,(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)} +$$
$$\frac{40\,c\sigma^2\,w}{(-1 + w\,(-1 + \eta))\,(x\,(-1 + \eta) - \eta)\,(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)} + \frac{36\,f\,\eta}{(-1 + w\,(-1 + \eta))^3} +$$
$$\frac{672\,f\,w\,\eta^2}{(-1 + w\,(-1 + \eta))^3} + \frac{40\,c\sigma^2\,\eta^2}{(-1 + w\,(-1 + \eta))\,(x\,(-1 + \eta) - \eta)\,(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)} +$$
$$\frac{120\,c\sigma^2\,w\,\eta^2}{(-1 + w\,(-1 + \eta))\,(x\,(-1 + \eta) - \eta)\,(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)} + \frac{108\,f\,\eta^3}{(-1 + w\,(-1 + \eta))^3} +$$
$$\frac{112\,f\,w\,\eta^4}{(-1 + w\,(-1 + \eta))^3} + \frac{448\,f\,w\,\eta}{(1 + w - w\,\eta)^3} + \frac{108\,f\,\eta^2}{(1 + w - w\,\eta)^3} + \frac{448\,f\,w\,\eta^3}{(1 + w - w\,\eta)^3} + \frac{36\,f\,\eta^4}{(1 + w - w\,\eta)^3} +$$
$$\frac{40\,f}{(1 + w - w\,\eta)^2} - \frac{120\,f\,\eta}{(1 + w - w\,\eta)^2} - \frac{40\,f\,w\,\eta}{(1 + w - w\,\eta)^2} + \frac{120\,f\,\eta^2}{(1 + w - w\,\eta)^2} + \frac{120\,f\,w\,\eta^2}{(1 + w - w\,\eta)^2} -$$
$$\frac{40\,f\,\eta^3}{(1 + w - w\,\eta)^2} - \frac{120\,f\,w\,\eta^3}{(1 + w - w\,\eta)^2} + \frac{40\,f\,w\,\eta^4}{(1 + w - w\,\eta)^2} - \frac{4\,f}{1 + w - w\,\eta} + \frac{4\,f\,\eta}{1 + w - w\,\eta} -$$
$$\frac{32\,f\,\eta^2}{1 + w - w\,\eta} + \frac{68\,f\,\eta^3}{1 + w - w\,\eta} - \frac{36\,f\,\eta^4}{1 + w - w\,\eta} - \frac{4\,f\,x}{(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)\,(x + \eta - x\,\eta)^2} +$$
$$\frac{12\,f\,x\,\eta}{(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)\,(x + \eta - x\,\eta)^2} - \frac{12\,f\,x\,\eta^2}{(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)\,(x + \eta - x\,\eta)^2} +$$
$$\frac{4\,f\,x\,\eta^3}{(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)\,(x + \eta - x\,\eta)^2} + \frac{6\,f\,w^2}{(x\,(-1 + \eta) - \eta)\,(w + x + \eta - w\,\eta - x\,\eta)^3} +$$
$$\frac{6\,f\,x^2}{(x\,(-1 + \eta) - \eta)\,(w + x + \eta - w\,\eta - x\,\eta)^3} + \frac{18\,f\,w\,\eta}{(x\,(-1 + \eta) - \eta)\,(w + x + \eta - w\,\eta - x\,\eta)^3} -$$

$$\frac{24\, f\, w^2\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{24\, f\, x^2\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{54\, f\, w\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{36\, f\, w^2\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{36\, f\, x^2\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{54\, f\, w\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{24\, f\, w^2\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{24\, f\, x^2\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{18\, f\, w\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{6\, f\, w^2\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{6\, f\, x^2\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{72\, f\, x}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, w\, x}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{72\, f\, x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{12\, f\, w^2\, x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{72\, f\, w\, x^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{180\, f\, w\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w^2\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, w^3\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, w^4\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{72\, f\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{216\, f\, w\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{216\, f\, w^2\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{72\, f\, w^3\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{72\, f\, w^4\, x^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{40\, f\, w^5\, x^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{216\, f\, w^3\, x^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{120\, f\, w^4\, x^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{216\, f\, w^2\, x^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{120\, f\, w^3\, x^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{72\, f\, w\, x^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{40\, f\, w^2\, x^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{324\, f\, x\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{144\, f\, w\, x\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{12\, f\, w^2\, x\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{288\, f\, x^2\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{144\, f\, w\, x^2\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{72\, f\, w^2\, x^2\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{432\, f\, w\, x^3\,\eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{324\, f\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{1044\, f\, w\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{846\, f\, w^2\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{162\, f\, w^3\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{306\, f\, w^4\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{18\, f\, w^5\, x\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{288\, f\, x^2\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{1116\, f\, w\, x^2\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{1404\, f\, w^2\, x^2\,\eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$

$$\frac{612\, f\, w^3\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{180\, f\, w^4\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{120\, f\, w^5\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{36\, f\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w^2\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{828\, f\, w^3\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1272\, f\, w^4\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{404\, f\, w^5\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1080\, f\, w^2\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2976\, f\, w^3\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1212\, f\, w^4\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, w\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2616\, f\, w^2\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1212\, f\, w^3\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{792\, f\, w\, x^6\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{404\, f\, w^2\, x^6\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{540\, f\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{288\, f\, w\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{60\, f\, w^2\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{720\, f\, w\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{180\, f\, w^2\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{1080\, f\, w\, x^3\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{540\, f\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{2412\, f\, w\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{2718\, f\, w^2\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{108\, f\, w^3\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{1314\, f\, w^4\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{24\, f\, w^5\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{360\, f\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{2124\, f\, w\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{3672\, f\, w^2\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{3492\, f\, w^3\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{2592\, f\, w^4\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{1092\, f\, w^5\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{180\, f\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{648\, f\, w\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{2916\, f\, w^2\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$
$$\frac{9552\, f\, w^3\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$
$$\frac{8328\, f\, w^4\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$

$$\frac{1804\, f\, w^5\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{1080\, f\, w\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{11\,400\, f\, w^2\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{17\,340\, f\, w^3\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{5412\, f\, w^4\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{4320\, f\, w\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{14\,064\, f\, w^2\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{5412\, f\, w^3\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{3960\, f\, w\, x^6\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{1804\, f\, w^2\, x^6\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{396\, f\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{432\, f\, w\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{120\, f\, w^2\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{288\, f\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{1440\, f\, w\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{240\, f\, w^2\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{1440\, f\, w\, x^3\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{72\, f\, w^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{40\, f\, w^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{360\, f\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{2700\, f\, w\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{4572\, f\, w^2\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1566\, f\, w^3\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4566\, f\, w^4\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{468\, f\, w^5\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1440\, f\, w\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2484\, f\, w^2\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{17\,148\, f\, w^3\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{14\,544\, f\, w^4\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4320\, f\, w^5\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{360\, f\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{180\, f\, w\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{22\,508\, f\, w^2\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{47\,592\, f\, w^3\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{29\,160\, f\, w^4\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{4620\, f\, w^5\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{9720\, f\, w\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{53\,460\, f\, w^2\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{57\,240\, f\, w^3\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{13\,860\, f\, w^4\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{19\,440\, f\, w\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{44\,280\, f\, w^2\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{13\,860\, f\, w^3\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{11\,880\, f\, w\, x^6\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{4620\, f\, w^2\, x^6\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{108\, f\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{468\, f\, w\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{120\, f\, w^2\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{72\, f\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{1440\, f\, w\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{180\, f\, w^2\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{1080\, f\, w\, x^3\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{216\, f\, w^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{696\, f\, w^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{284\, f\, w^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{1260\, f\, w\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{3060\, f\, w^2\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{9456\, f\, w^3\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{13\,578\, f\, w^4\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{2340\, f\, w^5\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{360\, f\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{360\, f\, w\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{15\,720\, f\, w^2\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{59\,964\, f\, w^3\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{43\,992\, f\, w^4\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{9540\, f\, w^5\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{360\, f\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{9360\, f\, w\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{87\,220\, f\, w^2\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{135\,144\, f\, w^3\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{61\,920\, f\, w^4\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{7260\, f\, w^5\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{38\,880\, f\, w\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{146\,340\, f\, w^2\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{118\,980\, f\, w^3\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{21\,780\, f\, w^4\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{51\,840\, f\, w\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{90\,360\, f\, w^2\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{21\,780\, f\, w^3\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{23\,760\, f\, w\, x^6\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{7260\, f\, w^2\, x^6\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{288\, f\, w\, x\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{60\, f\, w^2\, x\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{720\, f\, w\, x^2\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, w^2\, x^2\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{432\, f\, w\, x^3\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{216\, f\, w^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1632\, f\, w^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{2748\, f\, w^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{832\, f\, w^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{252\, f\, w\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{6162\, f\, w^2\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{30\,066\, f\, w^3\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{29\,514\, f\, w^4\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{4932\, f\, w^5\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{288\, f\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5796\, f\, w\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{65\,544\, f\, w^2\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{136\,596\, f\, w^3\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{79\,992\, f\, w^4\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{12\,240\, f\, w^5\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{180\, f\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{38\,700\, f\, w\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{201\,860\, f\, w^2\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{240\,840\, f\, w^3\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{82\,224\, f\, w^4\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{6600\, f\, w^5\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{90\,720\, f\, w\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{257\,760\, f\, w^2\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{160\,992\, f\, w^3\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{19\,800\, f\, w^4\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{90\,720\, f\, w\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{124\,272\, f\, w^2\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{19\,800\, f\, w^3\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{33\,264\, f\, w\, x^6\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{6600\, f\, w^2\, x^6\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{72\, f\, w\, x\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{12\, f\, w^2\, x\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{144\, f\, w\, x^2\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{12\, f\, w^2\, x^2\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{72\, f\, w\, x^3\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{72\, f\, w\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{1336\, f\, w^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{5148\, f\, w^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5796\, f\, w^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1232\, f\, w^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2196\, f\, w\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{24\,138\, f\, w^2\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{58\,392\, f\, w^3\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{42\,126\, f\, w^4\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5040\, f\, w^5\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{21\,636\, f\, w\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{132\,156\, f\, w^2\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{200\,508\, f\, w^3\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{88\,704\, f\, w^4\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{7560\, f\, w^5\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{79\,992\, f\, w\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{299\,068\, f\, w^2\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{276\,192\, f\, w^3\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{63\,504\, f\, w^4\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1848\, f\, w^5\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{136\,080\, f\, w\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{302\,400\, f\, w^2\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{137\,592\, f\, w^3\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5544\, f\, w^4\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\,864\, f\, w\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{114\,912\, f\, w^2\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5544\, f\, w^3\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{33\,264\, f\, w\, x^6\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1848\, f\, w^2\, x^6\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{360\, f\, w\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3404\, f\, w^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{8712\, f\, w^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{6972\, f\, w^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{784\, f\, w^5\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{6372\, f\, w\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{40\,536\, f\, w^2\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{70\,302\, f\, w^3\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{36\,282\, f\, w^4\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1008\, f\, w^5\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{37\,584\, f\, w\, x^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{162\,048\, f\, w^2\, x^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{186\,132\, f\, w^3\, x^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{53\,424\, f\, w^4\, x^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{2016\, f\, w^5\, x^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{100\,692\, f\, w\, x^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{288\,596\, f\, w^2\, x^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{195\,552\, f\, w^3\, x^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{15\,696\, f\, w^4\, x^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3432\, f\, w^5\, x^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{136\,080\, f\, w\, x^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{234\,360\, f\, w^2\, x^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{61\,200\, f\, w^3\, x^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{10\,296\, f\, w^4\, x^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{90\,720\, f\, w\, x^5\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{67\,248\, f\, w^2\, x^5\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{10\,296\, f\, w^3\, x^5\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{23\,760\, f\, w\, x^6\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3432\, f\, w^2\, x^6\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{720\, f\, w\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4540\, f\, w^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{8340\, f\, w^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4452\, f\, w^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{280\, f\, w^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{8640\, f\, w\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{39\,468\, f\, w^2\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{50\,376\, f\, w^3\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{14\,586\, f\, w^4\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3672\, f\, w^5\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{37\,800\, f\, w\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{123\,276\, f\, w^2\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{100\,068\, f\, w^3\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4464\, f\, w^4\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{8280\, f\, w^5\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{80\,640\, f\, w\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{175\,948\, f\, w^2\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{68\,112\, f\, w^3\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{21\,240\, f\, w^4\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{5280\, f\, w^5\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{90\,720\, f\, w\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{111\,960\, f\, w^2\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{5760\, f\, w^3\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{15\,840\, f\, w^4\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{51\,840\, f\, w\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{19\,080\, f\, w^2\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{15\,840\, f\, w^3\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{11\,880\, f\, w\, x^6\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{5280\, f\, w^2\, x^6\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{720\, f\, w\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3280\, f\, w^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4176\, f\, w^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{756\, f\, w^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{896\, f\, w^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{6480\, f\, w\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{21\,960\, f\, w^2\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{17\,856\, f\, w^3\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3012\, f\, w^4\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4770\, f\, w^5\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{22\,680\, f\, w\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{54\,180\, f\, w^2\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{19\,704\, f\, w^3\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{18\,828\, f\, w^4\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{7560\, f\, w^5\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{40\,320\, f\, w\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{59\,840\, f\, w^2\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{8676\, f\, w^3\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{26\,280\, f\, w^4\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3740\, f\, w^5\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{38\,880\, f\, w\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{24\,840\, f\, w^2\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{25\,920\, f\, w^3\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{11\,220\, f\, w^4\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{19\,440\, f\, w\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3240\, f\, w^2\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{11\,220\, f\, w^3\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3960\, f\, w\, x^6\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3740\, f\, w^2\, x^6\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{360\, f\, w\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1136\, f\, w^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{612\, f\, w^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{852\, f\, w^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{688\, f\, w^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2592\, f\, w\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{5760\, f\, w^2\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{228\, f\, w^3\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{6312\, f\, w^4\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{2808\, f\, w^5\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{7560\, f\, w\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{10\,140\, f\, w^2\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{8976\, f\, w^3\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{14\,688\, f\, w^4\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3660\, f\, w^5\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{11\,520\, f\, w\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{5680\, f\, w^2\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{19\,440\, f\, w^3\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{13\,848\, f\, w^4\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1540\, f\, w^5\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{9720\, f\, w\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3240\, f\, w^2\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{15\,924\, f\, w^3\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{4620\, f\, w^4\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4320\, f\, w\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4944\, f\, w^2\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{4620\, f\, w^3\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{792\, f\, w\, x^6\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1540\, f\, w^2\, x^6\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, w\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{76\, f\, w^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{312\, f\, w^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{564\, f\, w^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{248\, f\, w^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, w\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{24\, f\, w^2\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{2316\, f\, w^3\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{2760\, f\, w^4\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{852\, f\, w^5\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1080\, f\, w\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1020\, f\, w^2\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{6144\, f\, w^3\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{4896\, f\, w^4\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{960\, f\, w^5\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1440\, f\, w\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{2800\, f\, w^2\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{7656\, f\, w^3\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{3768\, f\, w^4\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{356\, f\, w^5\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1080\, f\, w\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{3180\, f\, w^2\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{4584\, f\, w^3\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1068\, f\, w^4\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, w\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1704\, f\, w^2\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1068\, f\, w^3\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, w\, x^6\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{356\, f\, w^2\, x^6\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, w^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{108\, f\, w^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{36\, f\, w^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{216\, f\, w^2\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{540\, f\, w^3\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{432\, f\, w^4\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{108\, f\, w^5\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{540\, f\, w^2\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{1080\, f\, w^3\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{648\, f\, w^4\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w^5\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{720\, f\, w^2\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{1080\, f\, w^3\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{432\, f\, w^4\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{36\, f\, w^5\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{540\, f\, w^2\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{540\, f\, w^3\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{108\, f\, w^4\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{216\, f\, w^2\, x^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{108\, f\, w^3\, x^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{36\, f\, w^2\, x^6\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{72\, f\, w}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{216\, f\, w\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{80\, c\sigma^2\, w}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{224\, c\sigma^2\, w^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{144\, c\sigma^2\, w^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{80\, c\sigma^2\, x}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{288\, c\sigma^2\, w\, x}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{208\, c\sigma^2\, w^2\, x}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{64\, c\sigma^2\, x^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{64\, c\sigma^2\, w\, x^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{80\, c\sigma^2\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{128\, c\sigma^2\, w\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{464\, c\sigma^2\, w^2\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{576\, c\sigma^2\, w^3\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{32\, c\sigma^2\, x\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{736\, c\sigma^2\, w\, x\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{832\, c\sigma^2\, w^2\, x\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{192\, c\sigma^2\, x^2\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{256\, c\sigma^2\, w\, x^2\, \eta}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{16\, c\sigma^2\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{432\, c\sigma^2\, w\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{48\, c\sigma^2\, w^2\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{864\, c\sigma^2\, w^3\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{176\, c\sigma^2\, x\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{480\, c\sigma^2\, w\, x\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{1248\, c\sigma^2\, w^2\, x\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{192\, c\sigma^2\, x^2\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{384\, c\sigma^2\, w\, x^2\, \eta^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{64\, c\sigma^2\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{160\, c\sigma^2\, w\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{400\, c\sigma^2\, w^2\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{576\, c\sigma^2\, w^3\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{128\, c\sigma^2\, x\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{96\, c\sigma^2\, w\, x\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{832\, c\sigma^2\, w^2\, x\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, x^2\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{256\, c\sigma^2\, w\, x^2\, \eta^3}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{64\, c\sigma^2\, w\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{208\, c\sigma^2\, w^2\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{144\, c\sigma^2\, w^3\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{128\, c\sigma^2\, w\, x\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{208\, c\sigma^2\, w^2\, x\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{64\, c\sigma^2\, w\, x^2\, \eta^4}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{12\, f\, x^2}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{48\, f\, x^2\, \eta}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{72\, f\, x^2\, \eta^2}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{48\, f\, x^2\, \eta^3}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{12\, f\, x^2\, \eta^4}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{4\, f\, w}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{4\, f\, x}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{228\, f\, w\, \eta}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{12\, f\, x\, \eta}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{12\, f\, w\, \eta^2}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{12\, f\, x\, \eta^2}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{76\, f\, w\, \eta^3}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{4\, f\, x\, \eta^3}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{6\, f\, x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)} + \frac{24\, f\, x^2\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)} -$$

$$\frac{36\, f\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)} + \frac{24\, f\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)} -$$

$$\frac{6\, f\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)} + \frac{42\, f}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} -$$

$$\frac{84\, f\, \eta}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+\frac{42\, f\, \eta^2}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{80\, c\sigma^2\, \eta}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{120\, c\sigma^2\, w\, \eta}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{40\, c\sigma^2\, w\, \eta^3}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{84\, f\, \eta}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,(1-\eta t)}-\frac{4\, f}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}+$$

$$\frac{256\, f\, w}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}-\frac{12\, f\, w^2}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}+$$

$$\frac{48\, f}{(-1+w\,(-1+\eta))\times(-1+\eta t)}+\frac{42\, f}{(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{40\, c\sigma^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{40\, c\sigma^2\, w}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{32\, c\sigma^2\, w\, x}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{32\, c\sigma^2\, x^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{88\, f\, \eta}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}-\frac{996\, f\, w\, \eta}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}+$$

$$\frac{48\, f\, w^2\, \eta}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}-\frac{96\, f\, \eta}{(-1+w\,(-1+\eta))\times(-1+\eta t)}+$$

$$\frac{24\, f\, x^2\, \eta}{(x\,(-1+\eta)-\eta)^3\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{80\, c\sigma^2\, \eta}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{88\, c\sigma^2\, w\, \eta}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{64\, c\sigma^2\, x\, \eta}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{128\, c\sigma^2\, w\, x\, \eta}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{128\, c\sigma^2\, x^2\, \eta}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{240\, f\, \eta^2}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}+\frac{1452\, f\, w\, \eta^2}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)}-$$

$$\frac{72\, f\, w^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} + \frac{44\, f\, \eta^2}{(-1+w\,(-1+\eta))\times(-1+\eta t)} +$$

$$\frac{42\, f\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{72\, c\sigma^2\, \eta^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{24\, c\sigma^2\, w\, \eta^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{192\, c\sigma^2\, x\, \eta^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{192\, c\sigma^2\, w\, x\, \eta^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{192\, c\sigma^2\, x^2\, \eta^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{232\, f\, \eta^3}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} - \frac{940\, f\, w\, \eta^3}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} +$$

$$\frac{48\, f\, w^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} + \frac{8\, f\, \eta^3}{(-1+w\,(-1+\eta))\times(-1+\eta t)} +$$

$$\frac{24\, f\, x^2\, \eta^3}{(x\,(-1+\eta)-\eta)^3\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, \eta^3}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{56\, c\sigma^2\, w\, \eta^3}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{192\, c\sigma^2\, x\, \eta^3}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{128\, c\sigma^2\, w\, x\, \eta^3}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{128\, c\sigma^2\, x^2\, \eta^3}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{76\, f\, \eta^4}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} + \frac{228\, f\, w\, \eta^4}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} -$$

$$\frac{12\, f\, w^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(-1+\eta t)} - \frac{4\, f\, \eta^4}{(-1+w\,(-1+\eta))\times(-1+\eta t)} +$$

$$\frac{32\, c\sigma^2\, \eta^4}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{32\, c\sigma^2\, w\, \eta^4}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, x\, \eta^4}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{32\, c\sigma^2\, w\, x\, \eta^4}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{32\, c\sigma^2\, x^2\, \eta^4}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{32\, f}{(1+w-w\,\eta)^2\,(-1+\eta t)} - \frac{48\, f\, w}{(1+w-w\,\eta)^2\,(-1+\eta t)} - \frac{136\, f\, \eta}{(1+w-w\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{144\, f\, w\, \eta}{(1+w-w\,\eta)^2\,(-1+\eta t)} + \frac{216\, f\, \eta^2}{(1+w-w\,\eta)^2\,(-1+\eta t)} - \frac{144\, f\, w\, \eta^2}{(1+w-w\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{152\, f\, \eta^3}{(1+w-w\,\eta)^2\,(-1+\eta t)} + \frac{48\, f\, w\, \eta^3}{(1+w-w\,\eta)^2\,(-1+\eta t)} + \frac{40\, f\, \eta^4}{(1+w-w\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{4\, f\, x}{(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(x+\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{12\, f\, x\, \eta}{(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(x+\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{12\, f\, x\, \eta^2}{(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(x+\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{4\, f\, x\, \eta^3}{(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(x+\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{6\, f\, w^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{6\, f\, x^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{18\, f\, w\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\, f\, w^2\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\, f\, x^2\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{54\, f\, w\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{36\, f\, w^2\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{36\, f\, x^2\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{54\, f\, w\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\, f\, w^2\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\, f\, x^2\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{18\, f\, w\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{6\, f\, w^2\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{6\, f\, x^2\, \eta^4}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, x}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w\, x}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{12\, f\, w^2\, x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w\, x^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{180\, f\, w\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, w^2\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w^3\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w^4\, x}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w^2\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w^3\, x^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w^4\, x^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{40\, f\, w^5\, x^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w^3\, x^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{120\, f\, w^4\, x^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w^2\, x^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{120\, f\, w^3\, x^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w\, x^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{40\, f\, w^2\, x^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{324\, f\, x\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{144\, f\, w\, x\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{12\, f\, w^2\, x\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{288\, f\, x^2\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{144\, f\, w\, x^2\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, w^2\, x^2\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{432\, f\, w\, x^3\, \eta}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{324\, f\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1044\, f\, w\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{846\, f\, w^2\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{162\, f\, w^3\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{306\, f\, w^4\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{18\, f\, w^5\, x\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{288\, f\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1116\, f\, w\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1404\, f\, w^2\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{612\, f\, w^3\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{180\, f\, w^4\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{120\, f\, w^5\, x^2\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{36\, f\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, w\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, w^2\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{828\, f\, w^3\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1272\, f\, w^4\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{404\, f\, w^5\, x^3\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1080\, f\, w^2\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2976\, f\, w^3\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1212\, f\, w^4\, x^4\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{432\, f\, w\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2616\, f\, w^2\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1212\, f\, w^3\, x^5\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{792\, f\, w\, x^6\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{404\, f\, w^2\, x^6\, \eta}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{540\, f\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{288\, f\, w\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{60\, f\, w^2\, x\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{432\, f\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{720\, f\, w\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{180\, f\, w^2\, x^2\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1080\, f\, w\, x^3\, \eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{540\, f\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2412\, f\, w\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2718\, f\, w^2\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{108\, f\, w^3\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1314\, f\, w^4\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\, f\, w^5\, x\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{360\, f\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2124\, f\, w\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3672\, f\, w^2\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3492\, f\, w^3\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2592\, f\, w^4\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1092\, f\, w^5\, x^2\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{180\, f\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{648\, f\, w\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2916\, f\, w^2\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{9552\, f\, w^3\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{8328\, f\, w^4\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1804\, f\, w^5\, x^3\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1080\, f\, w\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{11\,400\, f\, w^2\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{17\,340\, f\, w^3\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5412\, f\, w^4\, x^4\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4320\, f\, w\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{14\,064\, f\, w^2\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5412\, f\, w^3\, x^5\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3960\, f\, w\, x^6\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1804\, f\, w^2\, x^6\, \eta^2}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{396\, f\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{432\, f\, w\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{120\, f\, w^2\, x\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{288\, f\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1440\, f\, w\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{240\, f\, w^2\, x^2\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1440\, f\, w\, x^3\, \eta^3}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{40\, f\, w^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{360\, f\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2700\, f\, w\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4572\, f\, w^2\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1566\, f\, w^3\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4566\, f\, w^4\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{468\, f\, w^5\, x\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1440\, f\, w\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2484\, f\, w^2\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{17\,148\, f\, w^3\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{14\,544\, f\, w^4\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4320\, f\, w^5\, x^2\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{360\, f\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{180\, f\, w\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{22\,508\, f\, w^2\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{47\,592\, f\, w^3\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{29\,160\, f\, w^4\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4620\, f\, w^5\, x^3\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{9720\, f\, w\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{53\,460\, f\, w^2\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{57\,240\, f\, w^3\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{13\,860\, f\, w^4\, x^4\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,440\, f\, w\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{44\,280\, f\, w^2\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{13\,860\, f\, w^3\, x^5\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{11\,880\, f\, w\, x^6\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4620\, f\, w^2\, x^6\, \eta^3}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{468\, f\, w\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{120\, f\, w^2\, x\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1440\, f\, w\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{180\, f\, w^2\, x^2\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1080\, f\, w\, x^3\, \eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{696\, f\, w^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{284\, f\, w^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1260\, f\, w\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3060\, f\, w^2\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{9456\, f\, w^3\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{13\,578\, f\, w^4\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2340\, f\, w^5\, x\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{360\, f\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{360\, f\, w\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{15\,720\, f\, w^2\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{59\,964\, f\, w^3\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{43\,992\, f\, w^4\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{9540\, f\, w^5\, x^2\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{360\, f\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{9360\, f\, w\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{87\,220\, f\, w^2\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{135\,144\, f\, w^3\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{61\,920\, f\, w^4\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{7260\, f\, w^5\, x^3\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{38\,880\, f\, w\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{146\,340\, f\, w^2\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{118\,980\, f\, w^3\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{21\,780\, f\, w^4\, x^4\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{51\,840\, f\, w\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{90\,360\, f\, w^2\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{21\,780\, f\, w^3\, x^5\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{23\,760\, f\, w\, x^6\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{7260\, f\, w^2\, x^6\, \eta^4}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{288\, f\, w\, x\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{60\, f\, w^2\, x\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{720\, f\, w\, x^2\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, w^2\, x^2\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{432\, f\, w\, x^3\, \eta^5}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{216\, f\, w^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1632\, f\, w^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2748\, f\, w^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{832\, f\, w^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{252\, f\, w\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{6162\, f\, w^2\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{30\,066\, f\, w^3\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{29\,514\, f\, w^4\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4932\, f\, w^5\, x\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{288\, f\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5796\, f\, w\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{65\,544\, f\, w^2\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{136\,596\, f\, w^3\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{79\,992\, f\, w^4\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{12\,240\, f\, w^5\, x^2\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{180\, f\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{38\,700\, f\, w\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{201\,860\, f\, w^2\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{240\,840\, f\, w^3\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{82\,224\, f\, w^4\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6600\, f\, w^5\, x^3\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{90\,720\, f\, w\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{257\,760\, f\, w^2\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{160\,992\, f\, w^3\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,800\, f\, w^4\, x^4\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{90\,720\, f\, w\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{124\,272\, f\, w^2\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,800\, f\, w^3\, x^5\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{33\,264\, f\, w\, x^6\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6600\, f\, w^2\, x^6\, \eta^5}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w\, x\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{12\, f\, w^2\, x\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{144\, f\, w\, x^2\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{12\, f\, w^2\, x^2\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w\, x^3\, \eta^6}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{72\, f\, w\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1336\, f\, w^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{5148\, f\, w^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5796\, f\, w^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1232\, f\, w^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2196\, f\, w\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\,138\, f\, w^2\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{58\,392\, f\, w^3\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{42\,126\, f\, w^4\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5040\, f\, w^5\, x\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{21\,636\, f\, w\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{132\,156\, f\, w^2\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{200\,508\, f\, w^3\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{88\,704\, f\, w^4\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{7560\, f\, w^5\, x^2\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{79\,992\, f\, w\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{299\,068\, f\, w^2\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{276\,192\, f\, w^3\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{63\,504\, f\, w^4\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1848\, f\, w^5\, x^3\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{136\,080\, f\, w\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{302\,400\, f\, w^2\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{137\,592\, f\, w^3\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5544\, f\, w^4\, x^4\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\,864\, f\, w\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{114\,912\, f\, w^2\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5544\, f\, w^3\, x^5\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{33\,264\, f\, w\, x^6\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1848\, f\, w^2\, x^6\, \eta^6}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{360\, f\, w\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3404\, f\, w^2\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{8712\, f\, w^3\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6972\, f\, w^4\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{784\, f\, w^5\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6372\, f\, w\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{40\,536\, f\, w^2\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{70\,302\, f\, w^3\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{36\,282\, f\, w^4\, x\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1008\, f\, w^5\, x\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{37\,584\, f\, w\, x^2\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{162\,048\, f\, w^2\, x^2\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{186\,132\, f\, w^3\, x^2\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{53\,424\, f\, w^4\, x^2\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2016\, f\, w^5\, x^2\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{100\,692\, f\, w\, x^3\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{288\,596\, f\, w^2\, x^3\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{195\,552\, f\, w^3\, x^3\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{15\,696\, f\, w^4\, x^3\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3432\, f\, w^5\, x^3\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{136\,080\, f\, w\, x^4\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{234\,360\, f\, w^2\, x^4\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{61\,200\, f\, w^3\, x^4\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{10\,296\, f\, w^4\, x^4\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{90\,720\, f\, w\, x^5\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{67\,248\, f\, w^2\, x^5\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{10\,296\, f\, w^3\, x^5\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{23\,760\, f\, w\, x^6\, \eta^7}{(-1+w(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3432\, f\, w^2\, x^6\, \eta^7}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{720\, f\, w\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4540\, f\, w^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{8340\, f\, w^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4452\, f\, w^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{280\, f\, w^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{8640\, f\, w\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{39\,468\, f\, w^2\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{50\,376\, f\, w^3\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{14\,586\, f\, w^4\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3672\, f\, w^5\, x\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{37\,800\, f\, w\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{123\,276\, f\, w^2\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{100\,068\, f\, w^3\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4464\, f\, w^4\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{8280\, f\, w^5\, x^2\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{80\,640\, f\, w\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{175\,948\, f\, w^2\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{68\,112\, f\, w^3\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{21\,240\, f\, w^4\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{5280\, f\, w^5\, x^3\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{90\,720\, f\, w\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{111\,960\, f\, w^2\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{5760\, f\, w^3\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{15\,840\, f\, w^4\, x^4\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{51\,840\, f\, w\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,080\, f\, w^2\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{15\,840\, f\, w^3\, x^5\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{11\,880\, f\, w\, x^6\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{5280\, f\, w^2\, x^6\, \eta^8}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{720\, f\, w\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3280\, f\, w^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4176\, f\, w^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{756\, f\, w^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{896\, f\, w^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6480\, f\, w\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{21\,960\, f\, w^2\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{17\,856\, f\, w^3\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3012\, f\, w^4\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4770\, f\, w^5\, x\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{22\,680\, f\, w\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{54\,180\, f\, w^2\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{19\,704\, f\, w^3\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{18\,828\, f\, w^4\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{7560\, f\, w^5\, x^2\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{40\,320\, f\, w\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{59\,840\, f\, w^2\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{8676\, f\, w^3\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{26\,280\, f\, w^4\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3740\, f\, w^5\, x^3\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{38\,880\, f\, w\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{24\,840\, f\, w^2\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{25\,920\, f\, w^3\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{11\,220\, f\, w^4\, x^4\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,440\, f\, w\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3240\, f\, w^2\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{11\,220\, f\, w^3\, x^5\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3960\, f\, w\, x^6\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3740\, f\, w^2\, x^6\, \eta^9}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{360\, f\, w\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1136\, f\, w^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{612\, f\, w^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{852\, f\, w^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{688\, f\, w^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2592\, f\, w\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{5760\, f\, w^2\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{228\, f\, w^3\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{6312\, f\, w^4\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2808\, f\, w^5\, x\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{7560\, f\, w\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{10\,140\, f\, w^2\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{8976\, f\, w^3\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{14\,688\, f\, w^4\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3660\, f\, w^5\, x^2\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{11\,520\, f\, w\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{5680\, f\, w^2\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{19\,440\, f\, w^3\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{13\,848\, f\, w^4\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1540\, f\, w^5\, x^3\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{9720\, f\, w\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3240\, f\, w^2\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{15\,924\, f\, w^3\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4620\, f\, w^4\, x^4\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4320\, f\, w\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4944\, f\, w^2\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4620\, f\, w^3\, x^5\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{792\, f\, w\, x^6\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1540\, f\, w^2\, x^6\, \eta^{10}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, w\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{76\, f\, w^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{312\, f\, w^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{564\, f\, w^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{248\, f\, w^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{432\, f\, w\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{24\, f\, w^2\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{2316\, f\, w^3\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2760\, f\, w^4\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{852\, f\, w^5\, x\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1080\, f\, w\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1020\, f\, w^2\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{6144\, f\, w^3\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{4896\, f\, w^4\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{960\, f\, w^5\, x^2\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1440\, f\, w\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{2800\, f\, w^2\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{7656\, f\, w^3\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{3768\, f\, w^4\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{356\, f\, w^5\, x^3\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1080\, f\, w\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{3180\, f\, w^2\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{4584\, f\, w^3\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1068\, f\, w^4\, x^4\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{432\, f\, w\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1704\, f\, w^2\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1068\, f\, w^3\, x^5\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{72\, f\, w\, x^6\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{356\, f\, w^2\, x^6\, \eta^{11}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, w^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{108\, f\, w^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{36\, f\, w^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{216\, f\, w^2\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{540\, f\, w^3\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{432\, f\, w^4\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{108\, f\, w^5\, x\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{540\, f\, w^2\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{1080\, f\, w^3\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{648\, f\, w^4\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{108\, f\, w^5\, x^2\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{720\, f\, w^2\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{1080\, f\, w^3\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{432\, f\, w^4\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w^5\, x^3\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{540\, f\, w^2\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{540\, f\, w^3\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{108\, f\, w^4\, x^4\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{216\, f\, w^2\, x^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{108\, f\, w^3\, x^5\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} -$$

$$\frac{36\, f\, w^2\, x^6\, \eta^{12}}{(-1+w\,(-1+\eta))^3\,(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,(-1+\eta t)} +$$

$$\frac{76\, f\, w}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{4\, f\, x}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{228\, f\, w\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{12\, f\, x\, \eta}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{228\, f\, w\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{12\, f\, x\, \eta^2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{76\, f\, w\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{4\, f\, x\, \eta^3}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{12\, f\, x^2}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{48\, f\, x^2\, \eta}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{72\, f\, x^2\, \eta^2}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{48\, f\, x^2\, \eta^3}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} +$$

$$\frac{12\, f\, x^2\, \eta^4}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(-1+\eta t)} -$$

$$\frac{6\,f\,x^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)\,(-1+\eta t)}-$$

$$\frac{36\,f\,x^2\,\eta^2}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)\,(-1+\eta t)}-$$

$$\frac{6\,f\,x^2\,\eta^4}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)\,(-1+\eta t)}-64\,f\,\theta l+\frac{152\,f\,w\,\theta l}{(-1+w\,(-1+\eta))^3}+$$

$$\frac{48\,f\,\eta\,\theta l}{(-1+w\,(-1+\eta))^3}+\frac{12\,f\,w^2\,\eta\,\theta l}{(-1+w\,(-1+\eta))^3}+\frac{384\,f\,w\,\eta^2\,\theta l}{(-1+w\,(-1+\eta))^3}+\frac{40\,f\,\eta^3\,\theta l}{(-1+w\,(-1+\eta))^3}+$$

$$\frac{4\,f\,w^2\,\eta^3\,\theta l}{(-1+w\,(-1+\eta))^3}+\frac{4\,f\,\theta l}{(1+w-w\,\eta)^3}+\frac{4\,f\,w^2\,\theta l}{(1+w-w\,\eta)^3}+\frac{420\,f\,w\,\eta\,\theta l}{(1+w-w\,\eta)^3}+\frac{84\,f\,\eta^2\,\theta l}{(1+w-w\,\eta)^3}+$$

$$\frac{12\,f\,w^2\,\eta^2\,\theta l}{(1+w-w\,\eta)^3}+\frac{116\,f\,w\,\eta^3\,\theta l}{(1+w-w\,\eta)^3}-\frac{8\,f\,\theta l}{(1+w-w\,\eta)^2}-\frac{40\,f\,w\,\theta l}{(1+w-w\,\eta)^2}+\frac{16\,f\,\eta\,\theta l}{(1+w-w\,\eta)^2}+$$

$$\frac{80\,f\,w\,\eta\,\theta l}{(1+w-w\,\eta)^2}-\frac{8\,f\,\eta^2\,\theta l}{(1+w-w\,\eta)^2}-\frac{40\,f\,w\,\eta^2\,\theta l}{(1+w-w\,\eta)^2}-\frac{6\,f\,w^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+$$

$$\frac{4\,f\,w\,x\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{2\,f\,x^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{60\,f\,w\,x^2\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{18\,f\,w\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{18\,f\,w^2\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{14\,f\,x\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{12\,f\,w\,x\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{6\,f\,x^2\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{60\,f\,w\,x\,\eta\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{240\,f\,w\,x^2\,\eta\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{36\,f\,w\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{18\,f\,w^2\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+$$

$$\frac{28\,f\,x\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{12\,f\,w\,x\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{6\,f\,x^2\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{180\,f\,w\,x\,\eta^2\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{360\,f\,w\,x^2\,\eta^2\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{18\,f\,w\,\eta^3\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{6\,f\,w^2\,\eta^3\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{14\,f\,x\,\eta^3\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{4\,f\,w\,x\,\eta^3\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{2\,f\,x^2\,\eta^3\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^3}+\frac{180\,f\,w\,x\,\eta^3\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-$$

$$\frac{240\,f\,w\,x^2\,\eta^3\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{60\,f\,w\,x\,\eta^4\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}+$$

$$\frac{60\,f\,w\,x^2\,\eta^4\,\theta l}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3}-\frac{76\,f\,w\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{152\,f\,w\,\eta\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{76\,f\,w\,\eta^2\,\theta l}{(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{30\,f\,\theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}-$$

$$\frac{218\,f\,w\,\theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}-\frac{188\,f\,x\,\theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}-$$

$$\frac{158\, f\, \eta\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+\frac{436\, f\, w\, \eta\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$
$$\frac{376\, f\, x\, \eta\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+\frac{188\, f\, \eta^2\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}-$$
$$\frac{218\, f\, w\, \eta^2\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}-\frac{188\, f\, x\, \eta^2\, \theta l}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$
$$32\, f\, \theta l^2+\frac{80\, c\sigma^2\, x\, \eta\, \theta l}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}+$$
$$\frac{120\, c\sigma^2\, w\, x\, \eta\, \theta l}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}+$$
$$\frac{40\, c\sigma^2\, w\, x\, \eta^3\, \theta l}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}-$$
$$\frac{18\, f\, w\, x^3\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{36\, f\, w\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{108\, f\, w\, x^3\, \eta\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{18\, f\, w\, x\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{180\, f\, w\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{270\, f\, w\, x^3\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{72\, f\, w\, x\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{360\, f\, w\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{360\, f\, w\, x^3\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{108\, f\, w\, x\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{360\, f\, w\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{270\, f\, w\, x^3\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{72\, f\, w\, x\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{180\, f\, w\, x^2\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{108\, f\, w\, x^3\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{18\, f\, w\, x\, \eta^6\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{36\, f\, w\, x^2\, \eta^6\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{18\, f\, w\, x^3\, \eta^6\, \theta l}{(x+\eta-x\,\eta)^3\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{12\, f\, w^2\, x^2\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+\frac{72\, f\, w\, x^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{72\, f\, w\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{60\, f\, w^2\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-$$
$$\frac{360\, f\, w\, x^3\, \eta\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}-\frac{288\, f\, w\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$
$$\frac{120\, f\, w^2\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+\frac{720\, f\, w\, x^3\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p}+$$

$$\frac{432\, f\, w\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{120\, f\, w^2\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{720\, f\, w\, x^3\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{288\, f\, w\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{60\, f\, w^2\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{360\, f\, w\, x^3\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{72\, f\, w\, x^2\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{12\, f\, w^2\, x^2\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{72\, f\, w\, x^3\, \eta^5\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{18\, f\, w\, x\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{58\, f\, w^2\, x\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{120\, f\, w\, x^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{50\, f\, x^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{174\, f\, w\, x\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{232\, f\, w^2\, x\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{94\, f\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{480\, f\, w\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{200\, f\, x^3\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{56\, f\, x\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{414\, f\, w\, x\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{348\, f\, w^2\, x\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{282\, f\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{720\, f\, w\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{300\, f\, x^3\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{112\, f\, x\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{378\, f\, w\, x\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{232\, f\, w^2\, x\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{282\, f\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} +$$

$$\frac{480\, f\, w\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{200\, f\, x^3\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{56\, f\, x\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{120\, f\, w\, x\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{58\, f\, w^2\, x\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} + \frac{94\, f\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{120\, f\, w\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} - \frac{50\, f\, x^3\, \eta^4\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3\,\theta p} -$$

$$\frac{12\, f\, x^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p} + \frac{48\, f\, x^3\, \eta\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p} -$$

$$\frac{72\, f\, x^3\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+\frac{48\, f\, x^3\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}-$$

$$\frac{12\, f\, x^3\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+\frac{72\, f\, w\, x\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+$$

$$\frac{8\, f\, x^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}-\frac{216\, f\, w\, x\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}-$$

$$\frac{24\, f\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+\frac{216\, f\, w\, x\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+$$

$$\frac{24\, f\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}-\frac{72\, f\, w\, x\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}-$$

$$\frac{8\, f\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^2\,\theta p}+\frac{40\, c\sigma^2\, x\, \theta l}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{40\, c\sigma^2\, w\, x\, \theta l}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{40\, c\sigma^2\, x\, \eta^2\, \theta l}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{120\, c\sigma^2\, w\, x\, \eta^2\, \theta l}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{6\, f\, x^3\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{18\, f\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{24\, f\, x^3\, \eta\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{54\, f\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{36\, f\, x^3\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{54\, f\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{24\, f\, x^3\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{18\, f\, x^2\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{6\, f\, x^3\, \eta^4\, \theta l}{(x+\eta-x\,\eta)^3\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{8\, f\, x^2\, \theta l}{(x+\eta-x\,\eta)^2\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{24\, f\, x^2\, \eta\, \theta l}{(x+\eta-x\,\eta)^2\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{24\, f\, x^2\, \eta^2\, \theta l}{(x+\eta-x\,\eta)^2\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}-$$

$$\frac{8\, f\, x^2\, \eta^3\, \theta l}{(x+\eta-x\,\eta)^2\,(\theta p-(-1+w+x)\times(-1+\eta)\,\theta p)}+$$

$$\frac{32\, c\sigma^2\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)}+$$

$$\frac{48\, c\sigma^2\, w\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)}+$$

$$\frac{16\, c\sigma^2\, w\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)}-$$

$$\frac{64\, c\sigma^2\, w\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{96\, c\sigma^2\, w^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{64\, c\sigma^2\, x\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{64\, c\sigma^2\, w\, x\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{64\, c\sigma^2\, w^2\, x\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{32\, c\sigma^2\, x^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{64\, c\sigma^2\, w\, x^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{64\, c\sigma^2\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{64\, c\sigma^2\, w\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{368\, c\sigma^2\, w^2\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{192\, c\sigma^2\, x\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{352\, c\sigma^2\, w\, x\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{256\, c\sigma^2\, w^2\, x\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{80\, c\sigma^2\, x^2\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{256\, c\sigma^2\, w\, x^2\, \eta\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{96\, c\sigma^2\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{160\, c\sigma^2\, w\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{528\, c\sigma^2\, w^2\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{160\, c\sigma^2\, x\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{672\, c\sigma^2\, w\, x\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{384\, c\sigma^2\, w^2\, x\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{48\, c\sigma^2\, x^2\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{384\, c\sigma^2\, w\, x^2\, \eta^2\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{16\, c\sigma^2\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{256\, c\sigma^2\, w\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{336\, c\sigma^2\, w^2\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{544\, c\sigma^2\, w\, x\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{256\, c\sigma^2\, w^2\, x\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{16\, c\sigma^2\, x^2\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{256\, c\sigma^2\, w\, x^2\, \eta^3\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{16\, c\sigma^2\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{96\, c\sigma^2\, w\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{80\, c\sigma^2\, w^2\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{32\, c\sigma^2\, x\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{160\, c\sigma^2\, w\, x\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, w^2\, x\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{16\, c\sigma^2\, x^2\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, w\, x^2\, \eta^4\, \mu 1}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{16\, c\sigma^2\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} +$$

$$\frac{16\, c\sigma^2\, w\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} +$$

$$\frac{16\, c\sigma^2\, \eta^2\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} +$$

$$\frac{48\, c\sigma^2\, w\, \eta^2\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} -$$

$$\frac{16\, c\sigma^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{16\, c\sigma^2\, w\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, w\, x\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, x^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{32\, c\sigma^2\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{64\, c\sigma^2\, w\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{32\, c\sigma^2\, x\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, w\, x\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, x^2\, \eta\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{96\, c\sigma^2\, w\, \eta^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{96\, c\sigma^2\, x\, \eta^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{96\, c\sigma^2\, w\, x\, \eta^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{96\, c\sigma^2\, x^2\, \eta^2\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{32\, c\sigma^2\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{64\, c\sigma^2\, w\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{96\, c\sigma^2\, x\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, w\, x\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{64\, c\sigma^2\, x^2\, \eta^3\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, \eta^4\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{16\, c\sigma^2\, w\, \eta^4\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} -$$

$$\frac{32\, c\sigma^2\, x\, \eta^4\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, w\, x\, \eta^4\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, x^2\, \eta^4\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)} +$$

$$\frac{16\, c\sigma^2\, x\, \theta l\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p} +$$

$$\frac{16\, c\sigma^2\, w\, x\, \theta l\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p} +$$

$$\frac{16\, c\sigma^2\, x\, \eta^2\, \theta l\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p} +$$

$$\frac{48\, c\sigma^2\, w\, x\, \eta^2\, \theta l\, \mu 1}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p} +$$

$$\frac{32\, c\sigma^2\, x\, \eta\, \theta l\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p} +$$

$$\frac{48\, c\sigma^2\, w\, x\, \eta\, \theta l\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p} +$$

$$\frac{16\, c\sigma^2\, w\, x\, \eta^3\, \theta l\, \mu 1}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p} +$$

$$\frac{88\, c\sigma^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)} +$$

$$\frac{88\, c\sigma^2\, w\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)} +$$

$$\frac{88\, c\sigma^2\, \eta^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)} +$$

$$\frac{264\, c\sigma^2\, w\, \eta^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)} +$$

$$\frac{16\, c\sigma^2\, w\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{16\, c\sigma^2\, w^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{16\, c\sigma^2\, x\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{64\, c\sigma^2\, w\, x\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{16\, c\sigma^2\, w^2\, x\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{48\, c\sigma^2\, x^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{16\, c\sigma^2\, w\, x^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{16\, c\sigma^2\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{96\, c\sigma^2\, w\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{48\, c\sigma^2\, w^2\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{128\, c\sigma^2\, x\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{192\, c\sigma^2\, w\, x\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{64\, c\sigma^2\, w^2\, x\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{160\, c\sigma^2\, x^2\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{64\, c\sigma^2\, w\, x^2\, \eta\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{64\, c\sigma^2\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{160\, c\sigma^2\, w\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{48\, c\sigma^2\, w^2\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{240\, c\sigma^2\, x\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{192\, c\sigma^2\, w\, x\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{96\, c\sigma^2\, w^2\, x\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{192\, c\sigma^2\, x^2\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{96\, c\sigma^2\, w\, x^2\, \eta^2\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{96\, c\sigma^2\, w\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{16\, c\sigma^2\, w^2\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{160\, c\sigma^2\, x\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, w\, x\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{64\, c\sigma^2\, w^2\, x\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{96\, c\sigma^2\, x^2\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{64\, c\sigma^2\, w\, x^2\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{16\, c\sigma^2\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+$$

$$\frac{16\, c\sigma^2\, w\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{32\, c\sigma^2\, x\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{16\, c\sigma^2\, w^2\, x\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{16\, c\sigma^2\, x^2\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{16\, c\sigma^2\, w\, x^2\, \eta^4\, \mu 1^2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}+\frac{176\, c\sigma^2\, \eta\, \mu 1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{264\, c\sigma^2\, w\, \eta\, \mu 1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{88\, c\sigma^2\, w\, \eta^3\, \mu 1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)}+$$

$$\frac{88\, c\sigma^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{88\, c\sigma^2\, w\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{56\, c\sigma^2\, w\, x\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{56\, c\sigma^2\, x^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{176\, c\sigma^2\, \eta\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{208\, c\sigma^2\, w\, \eta\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{112\, c\sigma^2\, x\, \eta\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{224\, c\sigma^2\, w\, x\, \eta\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{224\, c\sigma^2\, x^2\, \eta\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{144\, c\sigma^2\, \eta^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{96\, c\sigma^2\, w\, \eta^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{336\, c\sigma^2\, x\, \eta^2\, \mu 1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{336\, c\sigma^2\, w\, x\, \eta^2\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{336\, c\sigma^2\, x^2\, \eta^2\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{112\, c\sigma^2\, \eta^3\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{80\, c\sigma^2\, w\, \eta^3\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{336\, c\sigma^2\, x\, \eta^3\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{224\, c\sigma^2\, w\, x\, \eta^3\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{224\, c\sigma^2\, x^2\, \eta^3\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{56\, c\sigma^2\, \eta^4\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{56\, c\sigma^2\, w\, \eta^4\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}-$$

$$\frac{112\, c\sigma^2\, x\, \eta^4\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{56\, c\sigma^2\, w\, x\, \eta^4\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{56\, c\sigma^2\, x^2\, \eta^4\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(-1+\eta t)}+$$

$$\frac{176\, c\sigma^2\, x\, \eta\, \theta l\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}+$$

$$\frac{264\, c\sigma^2\, w\, x\, \eta\, \theta l\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}+$$

$$\frac{88\, c\sigma^2\, w\, x\, \eta^3\, \theta l\, \mu1^2}{(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p}+$$

$$\frac{88\, c\sigma^2\, x\, \theta l\, \mu1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{88\, c\sigma^2\, w\, x\, \theta l\, \mu1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{88\, c\sigma^2\, x\, \eta^2\, \theta l\, \mu1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}+$$

$$\frac{264\, c\sigma^2\, w\, x\, \eta^2\, \theta l\, \mu1^2}{(1+w-w\,\eta)\,(x+\eta-x\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)\,\theta p}-\frac{32\, c\sigma^2\, x\, \mu2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{64\, c\sigma^2\, w\, x\, \mu2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-\frac{32\, c\sigma^2\, w^2\, x\, \mu2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2}-$$

$$\frac{16\, c\sigma^2\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{32\, c\sigma^2\, w\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{16\, c\sigma^2\, w^2\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, x\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{192\, c\sigma^2\, w\, x\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{128\, c\sigma^2\, w^2\, x\, \eta\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{16\, c\sigma^2\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{64\, c\sigma^2\, w\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{48\, c\sigma^2\, w^2\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{32\, c\sigma^2\, x\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{192\, c\sigma^2\, w\, x\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{192\, c\sigma^2\, w^2\, x\, \eta^2\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{32\, c\sigma^2\, w\, \eta^3\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{48\, c\sigma^2\, w^2\, \eta^3\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{64\, c\sigma^2\, w\, x\, \eta^3\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{128\, c\sigma^2\, w^2\, x\, \eta^3\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{16\, c\sigma^2\, w^2\, \eta^4\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{32\, c\sigma^2\, w^2\, x\, \eta^4\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{288\, c\sigma^2\, w\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{576\, c\sigma^2\, w^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{288\, c\sigma^2\, w^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{128\, c\sigma^2\, x\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{256\, c\sigma^2\, w\, x\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{128\, c\sigma^2\, w^2\, x\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{208\, c\sigma^2\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{160\, c\sigma^2\, w\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{1520\, c\sigma^2\, w^2\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{1152\, c\sigma^2\, w^3\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{256\, c\sigma^2\, x\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{768\, c\sigma^2\, w\, x\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{512\, c\sigma^2\, w^2\, x\, \eta\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{208\, c\sigma^2\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{544\, c\sigma^2\, w\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{1104\, c\sigma^2\, w^2\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{1728\, c\sigma^2\, w^3\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{128\, c\sigma^2\, x\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{768\, c\sigma^2\, w\, x\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{768\, c\sigma^2\, w^2\, x\, \eta^2\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{416\, c\sigma^2\, w\, \eta^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{48\, c\sigma^2\, w^2\, \eta^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{1152\, c\sigma^2\, w^3\, \eta^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{256\, c\sigma^2\, w\, x\, \eta^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{512\, c\sigma^2\, w^2\, x\, \eta^3\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{208\, c\sigma^2\, w^2\, \eta^4\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{288\, c\sigma^2\, w^3\, \eta^4\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{128\, c\sigma^2\, w^2\, x\, \eta^4\, \mu 1\, \mu 2}{(1+w-w\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2} -$$

$$\frac{36\, f\, w^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{48\, f\, x^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{108\, f\, w\, x^2\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{81\, f\, w\, \eta\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{108\, f\, w^2\, \eta\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{93\, f\, x\, \eta\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{144\, f\, x^2\, \eta\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{108\, f\, w\, x\, \eta\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, w\, x^2\, \eta\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{39\, f\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{162\, f\, w\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{108\, f\, w^2\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{186\, f\, x\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{144\, f\, x^2\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{324\, f\, w\, x\, \eta^2\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{648\, f\, w\, x^2\, \eta^2\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{39\, f\, \eta^3\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{81\, f\, w\, \eta^3\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{36\, f\, w^2\, \eta^3\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{93\, f\, x\, \eta^3\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{48\, f\, x^2\, \eta^3\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{324\, f\, w\, x\, \eta^3\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{432\, f\, w\, x^2\, \eta^3\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{108\, f\, w\, x\, \eta^4\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{108\, f\, w\, x^2\, \eta^4\, \theta l\, \Phi 1}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{36\, f\, w\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^2} +$$

$$\frac{72\, f\, w\, \eta\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{36\, f\, w\, \eta^2\, \theta l\, \Phi 1}{(w+x+\eta-w\,\eta-x\,\eta)^2} + 16\, f\, \theta l\, \Phi 2 - \frac{8\, f\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} +$$

$$\frac{8\, f\, w\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} + \frac{16\, f\, \eta\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} - \frac{16\, f\, w\, \eta\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} - \frac{8\, f\, \eta^2\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} + \frac{8\, f\, w\, \eta^2\, \theta l\, \Phi 2}{(1+w-w\,\eta)^2} -$$

$$\frac{3\, f\, w^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{2\, f\, w\, x\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{f\, x^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{30\, f\, w\, x^2\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{9\, f\, w\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{9\, f\, w^2\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} -$$

$$\frac{7\, f\, x\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{6\, f\, w\, x\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{3\, f\, x^2\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} +$$

$$\frac{30\, f\, w\, x\, \eta\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{120\, f\, w\, x^2\, \eta\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{18\, f\, w\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{9\, f\, w^2\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{14\, f\, x\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{6\, f\, w\, x\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{3\, f\, x^2\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{90\, f\, w\, x\, \eta^2\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{180\, f\, w\, x^2\, \eta^2\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{9\, f\, w\, \eta^3\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{3\, f\, w^2\, \eta^3\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{7\, f\, x\, \eta^3\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{2\, f\, w\, x\, \eta^3\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{f\, x^2\, \eta^3\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^3} +$$
$$\frac{90\, f\, w\, x\, \eta^3\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} - \frac{120\, f\, w\, x^2\, \eta^3\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{30\, f\, w\, x\, \eta^4\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} + \frac{30\, f\, w\, x^2\, \eta^4\, \theta l\, \Phi 2}{(x\,(-1+\eta)-\eta)\,(w+x+\eta-w\,\eta-x\,\eta)^3} -$$
$$\frac{38\, f\, w\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^2} + \frac{76\, f\, w\, \eta\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^2} - \frac{38\, f\, w\, \eta^2\, \theta l\, \Phi 2}{(w+x+\eta-w\,\eta-x\,\eta)^2} -$$
$$\frac{15\, f\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} - \frac{39\, f\, w\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} -$$
$$\frac{24\, f\, x\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} - \frac{9\, f\, \eta\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} +$$
$$\frac{78\, f\, w\, \eta\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} + \frac{48\, f\, x\, \eta\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} +$$
$$\frac{24\, f\, \eta^2\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} - \frac{39\, f\, w\, \eta^2\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} -$$
$$\frac{24\, f\, x\, \eta^2\, \theta l\, \Phi 2}{(1+w-w\,\eta)\,(w+x+\eta-w\,\eta-x\,\eta)} - 16\, f\, \theta l^2\, \Phi 2 + 20\, f\, \theta l^2\, \Phi 2^2\Big)$$

$\beta u =$

$$-\Big(\Big(12\, cv\, c\sigma\, f\, w\,(-1+x\,(-1+\eta)-\eta)\,(-1+\eta)^3\,(x+\eta-x\,\eta)^2\,\Big(4\, x^5\,(-1+\eta)^5\,(-1+\eta+\theta l-\eta t\,\theta l)\,\theta p + x^4\,(-1+\eta)^4\,\Big(4\times(-1+w\,(-1+\eta))\times(-1+\eta t)\,\theta l\,\mu 1 + \theta p\,\Big(4+16\,\eta-20\,\eta^2-4\,\theta l-20\,\eta\,\theta l+4\,\eta t\,\theta l+20\,\eta\,\eta t\,\theta l-2\,\theta l\,\mu 1+2\,\eta t\,\theta l\,\mu 1-2\,\theta l\,\mu 2+2\,\eta t\,\theta l\,\mu 2-\theta l\,\mu 1\,\Phi 1+\eta t\,\theta l\,\mu 1\,\Phi 1-\theta l\,\mu 1\,\Phi 2+\eta t\,\theta l\,\mu 1\,\Phi 2+w\,(-1+\eta)\times(-12+12\,\eta-(-1+\eta t)\,\theta l\,(2\times(6+\mu 2)+\mu 1\,(2+\Phi 1+\Phi 2)))\Big)\Big)+\theta p\,\Big(-3\,w^2\,(-1+\eta)^2\,(1+\eta)\times\Big(4\,\eta^3-6\,\eta t\,(1+\mu 1+\mu 2)+\eta^2\,(4\times(-1+\eta t\,\mu 1+\mu 2)-(-1+\eta t)\,\theta l\,(2\times(2+\mu 2)+\mu 1\,(2+\Phi 1+\Phi 2)))+\eta\,(-4\,\mu 2+2\,\eta t\,(3+\mu 1+3\,\mu 2)+\theta l\,(3\times(2+\Phi 1+\Phi 2)+4\,\mu 1\,(2+\Phi 1+\Phi 2)+\mu 2\,(8+3\,\Phi 1+3\,\Phi 2))-\eta t\,\theta l\,(3\times(2+\Phi 1+\Phi 2)+4\,\mu 1\,(2+\Phi 1+\Phi 2)+\mu 2\,(8+3\,\Phi 1+3\,\Phi 2)))\Big)+w^3\,(-1+\eta)^3\,\Big(4\,\eta^3-6\,\eta t\,(1+\mu 1+\mu 2)-\eta\,(4+8\,\eta t\,\mu 1+8\,\mu 2+(-1+\eta t)\,\theta l\,(5\,\mu 1\,(2+\Phi 1+\Phi 2)+(1+\mu 2)\times(10+3\,\Phi 1+3\,\Phi 2)))+\eta^2\,(8\,\mu 2+5\,\theta l\,\mu 1\,(2+\Phi 1+\Phi 2)+\theta l\,(1+\mu 2)\times(10+3\,\Phi 1+3\,\Phi 2)-\eta t\,(-2\times(3+7\,\mu 1+3\,\mu 2)+5\,\theta l\,\mu 1\,(2+\Phi 1+\Phi 2)+$

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                θl (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))))) +
        w (-1 + η) × (12 η^5 - 18 ηt (1 + μ1 + μ2) + η^4 (4 (ηt μ1 + μ2) - (-1 + ηt)
                θl (2 × (6 + μ2) + μ1 (2 + Φ1 + Φ2))) + η^3 (12 × (-1 + ηt μ1 + μ2) -
              (-1 + ηt) θl (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2))) - η
            (4 (ηt μ1 + μ2) + (-1 + ηt) θl (9 × (2 + Φ1 + Φ2) + 10 μ1 (2 + Φ1 + Φ2) +
                μ2 (20 + 9 Φ1 + 9 Φ2))) + η^2 (-12 μ2 + 6 ηt (3 + μ1 + 3 μ2) +
              θl (9 × (2 + Φ1 + Φ2) + 14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2)) -
              ηt θl (9 × (2 + Φ1 + Φ2) + 14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2)))) -
        (1 + η) × (4 η^5 - 4 η^4 (1 + (-1 + ηt) θl) - 6 ηt (1 + μ1 + μ2) - 3 η
            (1 + μ1 + μ2) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2))) - η^2
            (4 μ2 - 2 θl μ2 + 2 ηt θl μ2 - θl μ1 (2 + Φ1 + Φ2) +
              ηt μ1 (4 + θl (2 + Φ1 + Φ2))) + η^3 (4 μ2 + 2 θl μ2 +
              θl μ1 (2 + Φ1 + Φ2) - ηt (2 θl μ2 + μ1 (-4 + θl (2 + Φ1 + Φ2))))))) +
    x^3 (-1 + η)^3 (40 η^3 θp - 8 η^2 (3 + 5 × (-1 + ηt) θl) θp - 4 θp (ηt μ1 + μ2) -
        2 × (-1 + ηt) θl (2 θp μ2 + μ1 (-2 + θp (2 + Φ1 + Φ2))) +
        3 w^2 (-1 + η)^2 (4 × (-1 + ηt) θl μ1 + θp (-4 + 4 η - (-1 + ηt) θl
                (2 × (2 + μ2) + μ1 (2 + Φ1 + Φ2)))) + 2 η (6 × (-1 + ηt) θl μ1 + 2 θp
            (-4 + ηt μ1 + μ2 - (-1 + ηt) θl (2 × (2 + μ2) + μ1 (2 + Φ1 + Φ2)))) -
        w (-1 + η) × (4 × (4 + 3 η) × (-1 + ηt) θl μ1 + θp (48 η^2 - 4 × (3 + ηt μ1 + μ2) -
              (-1 + ηt) θl (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2)) -
              4 η (9 - ηt μ1 - μ2 + (-1 + ηt) θl (2 × (6 + μ2) + μ1 (2 + Φ1 + Φ2))))))) +
    x^2 (-1 + η)^2 (4 × (-1 + η) θp (w^3 (-1 + η)^3 - 6 η^2 - 10 η^3 - ηt μ1 - 3 η ηt
            μ1 - μ2 - 3 η μ2 - 3 w^2 (-1 + η)^2 (1 + 3 η + ηt μ1 + μ2) + w (-1 + η) ×
            (18 η^2 + 4 (ηt μ1 + μ2) + 3 η (3 + ηt μ1 + μ2))) - (-1 + ηt) θl
          (6 - 6 θp - 24 η^2 θp - 40 η^3 θp + 6 μ1 + 8 η μ1 + 12 η^2 μ1 - 8 θp μ1 - 12 η θp
            μ1 - 12 η^2 θp μ1 + 6 μ2 - 8 θp μ2 - 12 η θp μ2 - 12 η^2 θp μ2 - 3 θp Φ1 - 4 θp
            μ1 Φ1 - 6 η θp μ1 Φ1 - 6 η^2 θp μ1 Φ1 - 3 θp μ2 Φ1 - 3 θp Φ2 - 4 θp μ1 Φ2 - 6 η
            θp μ1 Φ2 - 6 η^2 θp μ1 Φ2 - 3 θp μ2 Φ2 + w^3 (-1 + η)^3 (-2 × (3 + 7 μ1 + 3 μ2) +
              5 θp μ1 (2 + Φ1 + Φ2) + θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2)) - 3 w^2 (-1 + η)^2
            (-2 × (3 + 5 μ1 + 4 η μ1 + 3 μ2) + θp (6 η (2 + μ2) + 5 μ1 (2 + Φ1 + Φ2) +
                3 η μ1 (2 + Φ1 + Φ2) + (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) + w (-1 + η) ×
            (-2 × ((11 + 16 η + 6 η^2) μ1 + 9 × (1 + μ2)) + θp (18 + 28 μ2 + 9 Φ1 +
                9 μ2 Φ1 + 9 Φ2 + 9 μ2 Φ2 + 14 μ1 (2 + Φ1 + Φ2) + 6 η^2 (2 × (6 + μ2) +
                    μ1 (2 + Φ1 + Φ2)) + 3 η (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2))))))) -
    x (-1 + η) × (2 × (-1 + η) θp (-8 η^3 - 10 η^4 - 3 ηt - 3 ηt μ1 - 4 η ηt μ1 -
          6 η^2 ηt μ1 - 4 η μ2 - 6 η^2 μ2 - 3 ηt μ2 - 3 w^2 (-1 + η)^2
            (6 η^2 + 2 μ2 + 4 η (1 + ηt μ1 + μ2) + ηt (3 + 5 μ1 + 3 μ2)) + w^3 (-1 + η)^3
            (2 + 4 η + 4 μ2 + ηt (3 + 7 μ1 + 3 μ2)) + w (-1 + η) × (24 η^3 + 2 μ2 +
              16 η (ηt μ1 + μ2) + 6 η^2 (3 + ηt μ1 + μ2) + ηt (9 + 11 μ1 + 9 μ2))) -
        (-1 + ηt) θl (6 + 6 η - 6 θp - 12 η θp - 16 η^3 θp - 20 η^4 θp + 6 μ1 + 6
            η μ1 + 4 η^2 μ1 + 4 η^3 μ1 - 6 θp μ1 - 16 η θp μ1 - 12 η^2 θp μ1 - 8 η^3 θp
            μ1 + 6 μ2 + 6 η μ2 - 6 θp μ2 - 16 η θp μ2 - 12 η^2 θp μ2 - 8 η^3 θp μ2 - 3
            θp Φ1 - 6 η θp Φ1 - 3 θp μ1 Φ1 - 8 η θp μ1 Φ1 - 6 η^2 θp μ1 Φ1 - 4 η^3
            θp μ1 Φ1 - 3 θp μ2 Φ1 - 6 η θp μ2 Φ1 - 3 θp Φ2 - 6 η θp Φ2 - 3 θp μ1
            Φ2 - 8 η θp μ1 Φ2 - 6 η^2 θp μ1 Φ2 - 4 η^3 θp μ1 Φ2 - 3 θp μ2 Φ2 - 6 η
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θp μ2 Φ2 + w^3 (-1 + η)^3 (-6 × (1 + μ1 + μ2) + 5 θp μ1 (2 + Φ1 + Φ2) +
    θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2) + 2 η (-3 - 7 μ1 - 3 μ2 + 5 θp μ1
        (2 + Φ1 + Φ2) + θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) - 3 w^2 (-1 + η)^2
  (-6 × (1 + μ1 + μ2) + η^2 (-4 μ1 + 6 θp (2 + μ2) + 3 θp μ1 (2 + Φ1 + Φ2)) +
    θp (3 × (2 + Φ1 + Φ2) + 4 μ1 (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)) +
    2 η (-3 - 5 μ1 - 3 μ2 + 5 θp μ1 (2 + Φ1 + Φ2) +
       θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) + w (-1 + η) ×
  (-18 × (1 + μ1 + μ2) + 4 η^3 (-μ1 + 2 θp (6 + μ2) + θp μ1 (2 + Φ1 + Φ2)) +
    η^2 (-16 μ1 + 6 θp (6 + 5 μ2) + 15 θp μ1 (2 + Φ1 + Φ2)) +
    θp (9 × (2 + Φ1 + Φ2) + 10 μ1 (2 + Φ1 + Φ2) + μ2 (20 + 9 Φ1 + 9 Φ2)) +
    2 η (-9 - 11 μ1 - 9 μ2 + θp (9 × (2 + Φ1 + Φ2) +
          14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2))))))) +
(-1 + x (-1 + η) - η) × (-48 u (17 u - 2 ϵ) (-1 + w (-1 + η))^3
    (-1 + x (-1 + η) - η) (x + η - x η)^3
    (w + x + η - w η - x η)^3 (-1 + η t) θp -
  6 cv^2 (-1 + x (-1 + η) - η) (x + η - x η)^2
    (-8 u (-1 + w (-1 + η))^3 (x (-1 + η) - η) (w + x + η - w η - x η)^3 (-1 + η t) θp -
      f w^2 (-1 + η)^3 (-4 x^3 (3 w (-1 + η) - 4 η) (-1 + η)^3 (-1 + η + θl - η t θl)
          θp - 4 x^4 (-1 + η)^4 (-1 + η + θl - η t θl) θp - 12 x^2 (-1 + η)^2
          (w^2 (-1 + η)^2 - 3 w (-1 + η) η + 2 η^2) (-1 + η + θl - η t θl)
          θp + θp (4 η^4 - 4 η^5 + 6 η t - 6 η η t - 6 η θl - 4 η^4 θl + 6 η η t θl +
            4 η^4 η t θl - 3 η θl Φ1 + 3 η η t θl Φ1 - 3 η θl Φ2 + 3 η η t θl Φ2 -
            3 w^2 (-1 + η)^2 (4 η^3 - 6 η t - 4 η^2 (1 + (-1 + η t) θl) +
               η (6 η t + 3 θl (2 + Φ1 + Φ2) - 3 η t θl (2 + Φ1 + Φ2))) + 3 w (-1 + η) ×
             (4 η^4 - 6 η t - 4 η^3 (1 + (-1 + η t) θl) + η (6 η t + 3 θl (2 + Φ1 + Φ2) -
                  3 η t θl (2 + Φ1 + Φ2))) + w^3 (-1 + η)^3 (4 η^2 - 6 η t + η (-4 + 6 η t +
                  θl (10 + 3 Φ1 + 3 Φ2) - η t θl (10 + 3 Φ1 + 3 Φ2)))) - x (-1 + η) ×
          (4 (w (-1 + η) - 4 η) (-1 + η) (w + η - w η)^2 θp - (-1 + η t) θl
              (6 - 6 θp - 16 η^3 θp - 3 θp Φ1 - 3 θp Φ2 - 3 w^2 (-1 + η)^2 (-6 + 8 η θp + 3
                    θp (2 + Φ1 + Φ2)) + 9 w (-1 + η) × (-2 + θp (2 + 4 η^2 + Φ1 + Φ2)) +
                w^3 (-1 + η)^3 (-6 + θp (10 + 3 Φ1 + 3 Φ2))))))) -
  3 f^2 (-1 + w (-1 + η)) (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)
    (-1 + η)^2 θl
    ((x^2 (-1 + η)^2 + η (1 + η) + x (1 + η - 2 η^2)) (40 x^3 (-1 + η)^3 (-1 + η + θl - η t θl)
          θp + 4 x^2 (-1 + η)^2 (-((-1 + η) θp (2 + 30 η + Φ1 + Φ2)) +
            2 × (-1 + η t) θl (-1 + θp (2 + 15 η + Φ1 + Φ2))) + θp
          (-40 η^4 + 4 η^3 (8 + 10 × (-1 + η t) θl - Φ1 - Φ2) + 6 η t (2 + Φ1 + Φ2) +
            η (-3 θl (2 + Φ1 + Φ2)^2 + 3 η t θl (2 + Φ1 + Φ2)^2 - 2 η t (2 + 3 Φ1 + 3 Φ2)) +
            4 η^2 (-((-1 + 2 θl) × (2 + Φ1 + Φ2)) + 2 η t (-1 + θl (2 + Φ1 + Φ2)))) + x
          (-1 + η) × (8 × (-1 + η) θp (15 η^2 + η t + η (2 + Φ1 + Φ2)) -
            (-1 + η t) θl (120 η^2 θp + 3 × (2 + Φ1 + Φ2) ×
                (-2 + θp (2 + Φ1 + Φ2)) + 8 η (-1 + 2 θp (2 + Φ1 + Φ2))))) -
      w^3 (-1 + η)^3 (40 x^3 (-1 + η)^3 (-1 + η + θl - η t θl) θp + x^2 (-1 + η)^2 (-8 ×
              (-1 + η) θp (7 + 15 η + Φ1 + Φ2) + (-1 + η t) θl (-2 × (14 + 3 Φ1 + 3 Φ2) +
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            θp (84 + 120 η + 28 Φ1 + 3 Φ1^2 + 28 Φ2 + 6 Φ1 Φ2 + 3 Φ2^2))) + θp
        (-40 η^4 + 8 η^3 (-2 + 5 × (-1 + ηt) θl - Φ1 - Φ2) + 6 ηt (2 + Φ1 + Φ2) +
          η (-3 θl (2 + Φ1 + Φ2)^2 + ηt (16 + 3 θl (2 + Φ1 + Φ2)^2)) +
          η^2 (8 × (7 + Φ1 + Φ2) - 2 ηt (14 + 3 Φ1 + 3 Φ2) -
              θl (84 + 3 Φ1^2 + 28 Φ2 + 3 Φ2^2 + Φ1 (28 + 6 Φ2)) +
              ηt θl (84 + 3 Φ1^2 + 28 Φ2 + 3 Φ2^2 + Φ1 (28 + 6 Φ2)))) + x (-1 + η) ×
        (2 × (-1 + η) θp (60 η^2 + 8 η (7 + Φ1 + Φ2) + ηt (14 + 3 Φ1 + 3 Φ2)) -
          (-1 + ηt) θl (120 η^2 θp + 3 × (2 + Φ1 + Φ2) ×
                (-2 + θp (2 + Φ1 + Φ2)) + 2 η (-14 - 3 Φ1 - 3 Φ2 +
                  θp (84 + 28 Φ1 + 3 Φ1^2 + 28 Φ2 + 6 Φ1 Φ2 + 3 Φ2^2)))))) +
    w (-1 + x (-1 + η) - η) × (-1 + η) × (-40 x^4 (-1 + η)^4 (-1 + η + θl - ηt θl)
        θp + 4 x^3 (-1 + η)^3 (2 × (-1 + η) θp (12 + 20 η + Φ1 + Φ2) -
          (-1 + ηt) θl (-2 + θp (26 + 40 η + 3 Φ1 + 3 Φ2))) + 2 x^2 (-1 + η)^2
        (-2 × (-1 + η) θp (2 + 60 η^2 + 2 ηt + Φ1 + Φ2 + 6 η (12 + Φ1 + Φ2)) +
          (-1 + ηt) θl (120 η^2 θp - 2 × (10 + 3 Φ1 + 3 Φ2) + 3 θp (8 + Φ1^2 + 6 Φ2 +
                Φ2^2 + 2 Φ1 (3 + Φ2)) + 2 η (-4 + θp (78 + 9 Φ1 + 9 Φ2)))) + θp
        (-40 η^5 + 8 η^4 (-7 + 5 × (-1 + ηt) θl - Φ1 - Φ2) + 6 ηt (2 + Φ1 + Φ2) +
          η (-3 θl (2 + Φ1 + Φ2)^2 + ηt (28 + 6 Φ1 + 6 Φ2 + 3 θl (2 + Φ1 + Φ2)^2)) +
          4 η^3 (22 + Φ1 + Φ2 - θl (26 + 3 Φ1 + 3 Φ2) +
              ηt (-2 + θl (26 + 3 Φ1 + 3 Φ2))) + 2 η^2 (-((2 + Φ1 + Φ2) ×
                  (-2 + 3 θl (4 + Φ1 + Φ2))) + ηt (-2 × (8 + 3 Φ1 + 3 Φ2) +
                  3 θl (8 + Φ1^2 + 6 Φ2 + Φ2^2 + 2 Φ1 (3 + Φ2))))) + x (-1 + η) ×
        (4 × (-1 + η) θp (40 η^3 + 6 η^2 (12 + Φ1 + Φ2) + 2 η (2 + 2 ηt + Φ1 + Φ2) +
              ηt (10 + 3 Φ1 + 3 Φ2)) - (-1 + ηt) θl (160 η^3 θp + 3 × (2 + Φ1 + Φ2) ×
                (-2 + θp (2 + Φ1 + Φ2)) + 4 η^2 (-2 + θp (78 + 9 Φ1 + 9 Φ2)) + 4 η
                (-10 - 3 Φ1 - 3 Φ2 + 3 θp (8 + Φ1^2 + 6 Φ2 + Φ2^2 + 2 Φ1 (3 + Φ2))))))) +
    w^2 (-1 + η)^2 (-80 x^4 (-1 + η)^4 (-1 + η + θl - ηt θl) θp + x^3 (-1 + η)^3
        (8 × (-1 + η) θp (19 + 40 η + 2 Φ1 + 2 Φ2) - (-1 + ηt) θl (320 η θp - 2 ×
                (14 + 3 Φ1 + 3 Φ2) + 3 θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)))) +
      x^2 (-1 + η)^2 (-2 × (-1 + η) θp (240 η^2 + 4 × (7 + Φ1 + Φ2) +
              12 η (19 + 2 Φ1 + 2 Φ2) + ηt (14 + 3 Φ1 + 3 Φ2)) + (-1 + ηt) θl
            (480 η^2 θp - 4 η (14 + 3 Φ1 + 3 Φ2) - 2 × (34 + 9 Φ1 + 9 Φ2) +
              9 η θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)) +
              θp (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2)))) + θp
        (-80 η^5 + 8 η^4 (-9 + 10 × (-1 + ηt) θl - 2 Φ1 - 2 Φ2) + 12 ηt (2 + Φ1 + Φ2) +
          2 η (-3 θl (2 + Φ1 + Φ2)^2 + ηt (22 + 3 Φ1 + 3 Φ2 + 3 θl (2 + Φ1 + Φ2)^2)) +
          η^2 (8 × (7 + Φ1 + Φ2) - 4 ηt (10 + 3 Φ1 + 3 Φ2) -
              θl (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2)) +
              ηt θl (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2))) +
          η^3 (8 × (12 + Φ1 + Φ2) - 3 θl (60 + Φ1^2 + 12 Φ2 + Φ2^2 +
                2 Φ1 (6 + Φ2)) + ηt (-2 × (14 + 3 Φ1 + 3 Φ2) +
                3 θl (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)))) + x
        (-1 + η) × (2 × (-1 + η) θp (160 η^3 + 8 η (7 + Φ1 + Φ2) + 12 η^2
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(19 + 2 Φ1 + 2 Φ2) + η ηt (28 + 6 Φ1 + 6 Φ2) + ηt (34 + 9 Φ1 + 9 Φ2)) -
(-1 + ηt) θl (320 η^3 θp + 6 × (2 + Φ1 + Φ2) × (-2 + θp (2 + Φ1 + Φ2)) +
2 η (-34 - 9 Φ1 - 9 Φ2 + θp (124 + 60 Φ1 + 9 Φ1^2 + 60 Φ2 +
18 Φ1 Φ2 + 9 Φ2^2)) + η^2 (-2 × (14 + 3 Φ1 + 3 Φ2) +
9 θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2))))))) -
2 f (-1 + x (-1 + η) - η) × (-1 + η) × (-12 uκ (-1 + w (-1 + η))^3
(x + η - x η)^3 (w + x + η - w η - x η)^2 (-1 + ηt) θl θp +
u ((x + η - x η)^2 (4 x^4 (-1 + η)^4 θp (48 + 30 η^3 - 2 η^2 (24 - 5 θl + 5 ηt (2 + θl)) -
8 θl (6 + Φ2) + ηt (-9 + 8 θl (6 + Φ2)) +
η (-30 - 9 θl + 2 θl Φ2 + ηt (29 + 9 θl - 2 θl Φ2))) +
η^2 θp (120 η^5 + 42 ηt - 8 η^4 (24 - 5 θl + 5 ηt (2 + θl)) -
4 η^3 (30 + 9 θl - 2 θl Φ2 + ηt (-29 - 9 θl + 2 θl Φ2)) + 3 η
(-14 ηt - 13 θl Φ1 - 5 θl (2 + Φ2) + ηt θl (13 Φ1 + 5 × (2 + Φ2))) +
4 η^2 (48 - 8 θl (6 + Φ2) + ηt (-9 + 8 θl (6 + Φ2)))) + x^2 (-1 + η)^2
(720 η^5 θp + 34 ηt θp - 48 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp -
24 η^3 θp (30 + 9 θl - 2 θl Φ2 + ηt (-29 - 9 θl + 2 θl Φ2)) +
η (-34 ηt θp + (-1 + ηt) θl (-108 + 141 θp Φ1 + 53 θp (2 + Φ2))) +
24 η^2 θp (48 - 8 θl (6 + Φ2) + ηt (-9 + 8 θl (6 + Φ2)))) +
4 x^3 (-1 + η)^3 (-4 × (-1 + η) η (-48 + 30 η^2 + 9 ηt - 2 η (9 + 10 ηt))
θp + (-1 + ηt) θl (11 + 4 θp (-2 + 10 η^3 - 3 Φ1 - Φ2 -
8 η (6 + Φ2) + η^2 (-9 + 2 Φ2)))) - 4 x (-1 + η) η
(120 η^5 θp + 28 ηt θp - 8 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp +
η (-28 ηt θp + (-1 + ηt) θl (-7 + 33 θp Φ1 + 13 θp (2 + Φ2))) +
4 η^2 θp (48 - 8 θl (6 + Φ2) + ηt (-9 + 8 θl (6 + Φ2))) - 4 η^3 θp
(30 + θl (9 - 2 Φ2) + ηt (-29 + θl (-9 + 2 Φ2))))) + 2 w^5 (-1 + η)^5
(x^3 (-1 + η)^3 (2 × (-1 + η) × (10 η^2 + η (11 - 10 ηt) - 11 × (4 + ηt))
θp + (-1 + ηt) θl (-20 + 3 θp (34 + 5 Φ1 + 5 Φ2))) - 3 x^2 (-1 + η)^2
(20 η^4 θp + η^3 (2 - 20 ηt) θp + 9 ηt θp - 2 η^2 (55 + ηt) θp +
η (88 + 13 ηt) θp + η (-1 + ηt) θl (-11 + 3 θp (34 + 5 Φ1 + 5 Φ2))) +
x (-1 + η) η (60 η^4 θp + η^3 (6 - 60 ηt) θp + 53 ηt θp - 6 η^2 (55 + ηt) θp +
η (264 + 13 ηt) θp + η (-1 + ηt) θl (-7 + 9 θp (34 + 5 Φ1 + 5 Φ2))) -
η^2 θp (20 η^4 + η^3 (2 - 20 ηt) + 20 ηt - 2 η^2 (55 + ηt) +
η (88 - 3 θl (34 + 5 Φ1 + 5 Φ2) + ηt (2 + 3 θl (34 + 5 Φ1 + 5 Φ2))))) +
3 w^4 (-1 + η)^4 (2 x^4 (-1 + η)^4 (2 × (-1 + η) × (10 η^2 + η (11 - 10 ηt) - 11 ×
(4 + ηt)) θp + (-1 + ηt) θl (-22 + θp (106 + 17 Φ1 + 17 Φ2))) +
η^2 θp (40 η^5 + η^4 (44 - 40 ηt) + 40 ηt - 4 η^3 (54 + 11 ηt) +
2 η (88 - 3 θl (34 + 5 Φ1 + 5 Φ2) + 3 ηt (-1 + θl (34 + 5 Φ1 + 5 Φ2))) +
η^2 (-44 - θl (158 + 25 Φ1 + 25 Φ2) +
ηt (50 + θl (158 + 25 Φ1 + 25 Φ2)))) +
x^2 (-1 + η)^2 (240 η^5 θp + 54 ηt θp - 48 η^4 (-3 + 5 ηt) θp -
12 η^3 (109 + 12 ηt) θp + η (88 × (6 + ηt) θp + 6 × (-1 + ηt) θl
(-11 + 3 θp (34 + 5 Φ1 + 5 Φ2))) + η^2 (22 × (18 + 11 ηt) θp +
(-1 + ηt) θl (-92 + 3 θp (370 + 59 Φ1 + 59 Φ2))) -
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x (-1 + η) η (160 η^5 θp + 106 ηt θp - 8 η^4 (-17 + 20 ηt) θp -
    4 η^3 (217 + 34 ηt) θp + 2 η (11 × (24 + ηt) θp + (-1 + ηt) θl
        (-7 + 9 θp (34 + 5 Φ1 + 5 Φ2))) + η^2 (4 × (11 + 42 ηt) θp + (-1 +
          ηt) θl (-18 + θp (686 + 109 Φ1 + 109 Φ2)))) - x^3 (-1 + η)^3
  (4 × (-1 + η) × (40 η^3 + η^2 (54 - 40 ηt) - 4 × (11 + 3 ηt) - 3 η
        (55 + 18 ηt)) θp + (-1 + ηt) θl (-40 + 6 θp (34 + 5 Φ1 + 5 Φ2) +
       η (-118 + θp (794 + 127 Φ1 + 127 Φ2)))) + w (x (-1 + η) - η)
(-1 + η) (-x^3 (-1 + η)^3 (2 × (-1 + η) × (600 η^4 - 51 ηt + 72 η
        (-16 + 3 ηt) - 60 η^3 (-23 + 10 ηt) - 8 η^2 (384 + 65 ηt)) θp -
    (-1 + ηt) θl (132 + 456 η + 40 η^3 θp (43 + 2 Φ2) -
        48 η^2 θp (119 + 8 Φ2) - 3 η θp (906 + 189 Φ1 + 197 Φ2) -
        6 θp (17 Φ1 + 9 × (2 + Φ2))) - 4 x^5 (-1 + η)^5 θp (30 η^3 +
    η^2 (3 - 30 ηt) + 2 × (66 + ηt - 6 θl (11 + Φ2) + 6 ηt θl (11 + Φ2)) +
    η (-165 + θl (31 + 2 Φ2) + ηt (28 - θl (31 + 2 Φ2)))) + 4 x^4
  (-1 + η)^4 ((-1 + η) × (150 η^3 + η^2 (255 - 150 ηt) + 9 × (-16 + 3 ηt) -
        14 η (51 + 5 ηt)) θp - (-1 + ηt) θl (33 + θp (5 η^2 (37 + 2 Φ2) -
          12 × (14 + 3 Φ1 + 3 Φ2) - 3 η (229 + 18 Φ2)))) +
  η^2 θp (120 η^6 + η^5 (372 - 120 ηt) + 94 ηt + η (-5 θl (15 Φ1 +
          7 × (2 + Φ2)) + ηt (32 + 75 θl Φ1 + 35 θl (2 + Φ2))) +
    4 η^3 (42 - 3 θl (53 + 2 Φ2) + ηt (89 + 3 θl (53 + 2 Φ2))) - 4 η^4
      (309 - θl (61 + 2 Φ2) + ηt (32 + θl (61 + 2 Φ2))) + 3 η^2 (192 - θl
        (222 + 39 Φ1 + 47 Φ2) + ηt (-78 + θl (222 + 39 Φ1 + 47 Φ2)))) +
  x^2 (-1 + η)^2 (1200 η^6 θp + 136 ηt θp - 120 η^5 (-19 + 10 ηt) θp +
    η (302 ηt θp + (-1 + ηt) θl (-222 + 279 θp Φ1 + 143 θp (2 + Φ2))) -
    8 η^4 θp (1257 - 5 θl (49 + 2 Φ2) + 5 ηt (8 + θl (49 + 2 Φ2))) +
    8 η^3 θp (390 - 3 θl (247 + 14 Φ2) + ηt (271 + θl (741 + 42 Φ2))) +
    3 η^2 (2 × (576 - 181 ηt) θp + (-1 + ηt) θl
        (-136 + 3 θp (454 + 91 Φ1 + 99 Φ2)))) -
  x (-1 + η) η (600 η^6 θp + 266 ηt θp - 300 η^5 (-5 + 2 ηt) θp +
    2 η (98 ηt θp + (-1 + ηt) θl (-27 + 126 θp Φ1 + 62 θp (2 + Φ2))) -
    4 η^4 θp (1401 - 5 θl (55 + 2 Φ2) + 5 ηt (20 + θl (55 + 2 Φ2))) +
    8 η^3 θp (150 - 6 θl (64 + 3 Φ2) + ηt (179 + 6 θl (64 + 3 Φ2))) +
    3 η^2 ((768 - 298 ηt) θp + (-1 + ηt) θl
        (-28 + θp (902 + 171 Φ1 + 195 Φ2)))) + w^2 (-1 + η)^2
(4 x^6 (-1 + η)^6 θp (44 + 10 η^3 + η^2 (1 - 10 ηt) - η (55 + ηt) - 44 θl -
    4 θl Φ2 + ηt (11 + 4 θl (11 + Φ2))) - 12 x^5 (-1 + η)^5 ((-1 + η) ×
      (20 η^3 + η^2 (52 - 20 ηt) - 2 × (66 + ηt) - η (55 + 52 ηt)) θp +
    (-1 + ηt) θl (-11 + 4 θp (35 + 3 Φ1 + 4 Φ2) + η θp (57 + 6 Φ2))) +
  3 x^4 (-1 + η)^4 (2 × (-1 + η) × (-96 + 100 η^4 + η^3 (410 - 100 ηt) +
        ηt - 12 η (113 + 5 ηt) - 10 η^2 (5 + 41 ηt)) θp +
    (-1 + ηt) θl (-132 - 196 η + 20 η^2 θp (11 + 2 Φ2) +
        2 θp (150 + 51 Φ1 + 43 Φ2) + η θp (2846 + 237 Φ1 + 317 Φ2))) +
  η^2 θp (40 η^7 + η^6 (364 - 40 ηt) + 40 ηt - 4 η^5 (-44 + 91 ηt) + 2
      η (121 ηt - 15 θl Φ1 - 7 θl (2 + Φ2) + ηt θl (15 Φ1 + 7 × (2 + Φ2))) -
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    4 η^4 (595 - θl (79 + 2 Φ2) + ηt (-35 + θl (79 + 2 Φ2))) +
    3 η^3 (408 - θl (594 + 39 Φ1 + 55 Φ2) +
        ηt (82 + θl (594 + 39 Φ1 + 55 Φ2))) + 3 η^2 (192 - θl
         (262 + 75 Φ1 + 67 Φ2) + ηt (-88 + θl (262 + 75 Φ1 + 67 Φ2)))) +
  3 x^2 (-1 + η)^2 (200 η^7 θp + 18 ηt θp - 20 η^6 (-61 + 10 ηt) θp - 20
      η^5 (13 + 61 ηt) θp + 4 η^4 (-1718 + 215 ηt + 150 θl - 150 ηt θl) θp +
    2 η (192 ηt θp + (-1 + ηt) θl (-11 + 15 θp Φ1 + 7 θp (2 + Φ2))) +
    4 η^3 ((1140 + 119 ηt) θp + (-1 + ηt) θl (-41 +
          θp (1460 + 111 Φ1 + 151 Φ2))) + 3 η^2 (2 × (192 - 53 ηt) θp +
        (-1 + ηt) θl (-92 + θp (562 + 177 Φ1 + 153 Φ2)))) -
  x (-1 + η) η (240 η^7 θp + 12 η^5 (25 - 152 ηt) θp + 106 ηt θp -
    48 η^6 (-38 + 5 ηt) θp + 2 η (487 ηt θp +
        (-1 + ηt) θl (-7 + 45 θp Φ1 + 21 θp (2 + Φ2))) -
    12 η^4 θp (929 - θl (107 + 2 Φ2) + ηt (-82 + θl (107 + 2 Φ2))) +
    η^3 (12 × (540 + 77 ηt) θp + 6 × (-1 + ηt) θl
         (-14 + θp (1474 + 105 Φ1 + 145 Φ2))) + 3 η^2 (4 × (192 - 77 ηt)
         θp + (-1 + ηt) θl (-54 + θp (1086 + 327 Φ1 + 287 Φ2)))) -
  x^3 (-1 + η)^3 (4 × (-1 + η) × (200 η^5 + η^3 (470 - 1120 ηt) - 102 ηt -
        9 η (64 + 3 ηt) - 40 η^4 (-28 + 5 ηt) - 12 η^2 (348 + 25 ηt)) θp +
      (-1 + ηt) θl (-40 + 40 η^3 θp (-17 + 2 Φ2) + 2 θp (14 +
            15 Φ1 + 7 Φ2) + 6 η^2 (-144 + θp (2886 + 231 Φ1 + 311 Φ2)) +
        3 η (-354 + θp (1162 + 381 Φ1 + 325 Φ2)))))) + w^3 (-1 + η)^3
(4 x^5 (-1 + η)^5 (3 × (-1 + η) × (10 η^2 + η (11 - 10 ηt) - 11 × (4 + ηt))
      θp + (-1 + ηt) θl (-11 + 4 θp (35 + 3 Φ1 + 4 Φ2))) -
  x^4 (-1 + η)^4 (2 × (-1 + η) × (-792 + 300 η^3 + η^2 (510 - 300 ηt) -
        29 ηt - 102 η (11 + 5 ηt)) θp + (-1 + ηt) θl (-396 - 196 η +
        18 θp (106 + 17 Φ1 + 17 Φ2) + η θp (2438 + 237 Φ1 + 301 Φ2))) -
  η^2 θp (120 η^6 + η^5 (372 - 120 ηt) + 120 ηt - 12 η^4 (42 + 31 ηt) +
    2 η (96 - θl (138 + 45 Φ1 + 37 Φ2) +
        ηt (63 + θl (138 + 45 Φ1 + 37 Φ2))) + η^3 (-1644 -
        θl (146 + 39 Φ1 + 39 Φ2) + ηt (346 + θl (146 + 39 Φ1 + 39 Φ2))) +
    η^2 (1464 - θl (1830 + 225 Φ1 + 241 Φ2) + ηt
         (-100 + θl (1830 + 225 Φ1 + 241 Φ2)))) +
  x (-1 + η) η (600 η^6 θp + 318 ηt θp - 300 η^5 (-5 + 2 ηt) θp -
    12 η^4 (233 + 125 ηt) θp + 6 η ((96 + 109 ηt) θp +
        (-1 + ηt) θl (-7 + θp (138 + 45 Φ1 + 37 Φ2))) +
    2 η^3 (16 × (-183 + 49 ηt) θp + (-1 + ηt) θl (-14 +
          θp (598 + 105 Φ1 + 113 Φ2))) + η^2 (8 × (747 - 55 ηt) θp +
        3 × (-1 + ηt) θl (-54 + θp (2466 + 327 Φ1 + 343 Φ2)))) -
  x^2 (-1 + η)^2 (1200 η^6 θp + 162 ηt θp - 120 η^5 (-19 + 10 ηt) θp -
    24 η^4 (251 + 95 ηt) θp + 6 η (12 × (8 + 13 ηt) θp +
        (-1 + ηt) θl (-33 + θp (138 + 45 Φ1 + 37 Φ2))) +
    4 η^3 (3 × (-598 + 233 ηt) θp + (-1 + ηt) θl (-41 +
          θp (818 + 111 Φ1 + 127 Φ2))) + 3 η^2 (6 × (508 - 23 ηt) θp +
        (-1 + ηt) θl (-276 + θp (3738 + 531 Φ1 + 547 Φ2)))) +
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                x^3 (-1 + η)^3 (4 × (-1 + η) × (-48 + 300 η^4 + η^3 (690 - 300 ηt) -
                      93 ηt - 89 η (18 + ηt) - 6 η^2 (149 + 115 ηt)) θp +
                  (-1 + ηt) θl (-120 + θp (276 + 90 Φ1 + 74 Φ2) +
                      η^2 (-288 + θp (4100 + 462 Φ1 + 558 Φ2)) +
                      η (-1062 + θp (7554 + 1143 Φ1 + 1159 Φ2))))))) +
6 cσ^2 f (x (-1 + η) - η) (-1 + η)^3 (-4 x^7 (-1 + η)^7 (-1 + η + θl - ηt θl)
    θp + 2
    x^6
    (-1 + η)^6
    (-2 × (-1 + w (-1 + η)) × (-1 + ηt)
        θl μ1 (2 + 5 × (-1 + w (-1 + η)) μ1) +
      θp (-4 - 10 η + 14 η^2 + 4 θl + 14 η θl - 4 ηt θl - 14 η ηt θl + 2
          θl μ1 - 2 ηt θl μ1 + 2 θl μ2 - 2 ηt θl μ2 - 20 μ1 μ2 + 10
          w^2 (-1 + η)^3 μ1 μ2 + 20 η μ1 μ2 + 10 θl μ1 μ2 - 10 ηt
          θl μ1 μ2 + θl μ1 Φ1 - ηt θl μ1 Φ1 + θl μ1 Φ2 - ηt θl μ1
          Φ2 - w (-1 + η) × (-6 × (1 + 5 μ1 μ2) + 6 η (1 + 5 μ1 μ2) -
             (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))))) +
  2 x^5 (-1 + η)^5 (-2 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1
      (-4 + 10 μ1 + 15 w^2 (-1 + η)^2 μ1 + 5 η (-2 + 5 μ1) - 2
          μ2 - w (-1 + η) × (25 × (1 + η) μ1 - 2 × (3 + μ2))) +
      θp (2 + 22 η + 18 η^2 - 42 η^3 - 2 θl - 24 η θl - 42 η^2 θl + 2 ηt θl + 24
          η ηt θl + 42 η^2 ηt θl + 4 ηt μ1 - 4 η ηt μ1 - 6 θl μ1 - 12
          η θl μ1 + 6 ηt θl μ1 + 12 η ηt θl μ1 - 10 ηt μ1^2 + 10 η ηt
          μ1^2 - 2 θl μ1^2 + 2 ηt θl μ1^2 + 4 μ2 - 4 η μ2 - 6 θl μ2 - 12
          η θl μ2 + 6 ηt θl μ2 + 12 η ηt θl μ2 + 44 μ1 μ2 + 30 w^3
          (-1 + η)^4 μ1 μ2 + 76 η μ1 μ2 - 120 η^2 μ1 μ2 - 26 θl μ1
          μ2 - 60 η θl μ1 μ2 + 26 ηt θl μ1 μ2 + 60 η ηt θl μ1 μ2 + 2
          μ2^2 - 2 η μ2^2 - 2 θl μ2^2 + 2 ηt θl μ2^2 - 3 θl μ1 Φ1 - 6 η θl
          μ1 Φ1 + 3 ηt θl μ1 Φ1 + 6 η ηt θl μ1 Φ1 - θl μ1^2 Φ1 + ηt θl
          μ1^2 Φ1 - 2 θl μ1 μ2 Φ1 + 2 ηt θl μ1 μ2 Φ1 - 3 θl μ1 Φ2 - 6 η
          θl μ1 Φ2 + 3 ηt θl μ1 Φ2 + 6 η ηt θl μ1 Φ2 - θl μ1^2 Φ2 + ηt
          θl μ1^2 Φ2 - 2 θl μ1 μ2 Φ2 + 2 ηt θl μ1 μ2 Φ2 - w^2 (-1 + η)^2
          (60 η^2 μ1 μ2 + 2 × (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
             2 η (3 - 5 ηt μ1^2 + 22 μ1 μ2 + μ2^2) - (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) +
                3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) + 2
          w (-1 + η) × (-6 - 2 ηt μ1 + 10 ηt μ1^2 - 2 μ2 - 59 μ1 μ2 - 2 μ2^2 +
             18 η^2 (1 + 5 μ1 μ2) - (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) +
                3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) +
             η (-12 + 2 ηt (1 - 5 μ1) μ1 + 2 μ2 - 31 μ1 μ2 + 2 μ2^2 -
                3 × (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))))) -
  x^4 (-1 + η)^4 (-4 × (-1 + η) θp (5 η + 30 η^2 + 35 η^3 + 4 ηt μ1 + 10 η ηt
          μ1 - 10 ηt μ1^2 - 25 η ηt μ1^2 + 4 μ2 + 10 η μ2 + 14 μ1
          μ2 + 15 w^4 (-1 + η)^4 μ1 μ2 + 110 η μ1 μ2 + 150 η^2
          μ1 μ2 + 2 ηt μ1 μ2 + 2 μ2^2 + 5 η μ2^2 - w^3 (-1 + η)^3
          (1 - 15 ηt μ1^2 + 3 × (22 + 25 η) μ1 μ2 + 3 μ2^2) + w^2 (-1 + η)^2
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(6 + 6 μ2 + 111 μ1 μ2 + 75 η^2 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2) +
   5 η (3 - 5 ηt μ1^2 + 52 μ1 μ2 + μ2^2)) - w (-1 + η) ×
(3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2) + 45 η^2
    (1 + 5 μ1 μ2) + 5 η (6 + 2 ηt (1 - 5 μ1) μ1 + 2 μ2 + 59 μ1 μ2 + 2 μ2^2))) +
(-1 + ηt) θl (-6 + 6 θp + 20 η θp + 120 η^2 θp + 140 η^3 θp - 20 μ1 - 64
    η μ1 - 80 η^2 μ1 + 24 θp μ1 + 60 η θp μ1 + 60 η^2 θp μ1 + 14
    μ1^2 + 60 w^4 (-1 + η)^4 μ1^2 + 160 η μ1^2 + 200 η^2 μ1^2 + 14 θp
    μ1^2 + 20 η θp μ1^2 - 12 μ2 + 24 θp μ2 + 60 η θp μ2 + 60 η^2
    θp μ2 - 28 μ1 μ2 - 32 η μ1 μ2 + 56 θp μ1 μ2 + 260 η θp μ1
    μ2 + 300 η^2 θp μ1 μ2 - 6 μ2^2 + 14 θp μ2^2 + 20 η θp μ2^2 + 3
    θp Φ1 + 12 θp μ1 Φ1 + 30 η θp μ1 Φ1 + 30 η^2 θp μ1 Φ1 + 7 θp
    μ1^2 Φ1 + 10 η θp μ1^2 Φ1 + 6 θp μ2 Φ1 + 14 θp μ1 μ2 Φ1 + 20
    η θp μ1 μ2 Φ1 + 3 θp μ2^2 Φ1 + 3 θp Φ2 + 12 θp μ1 Φ2 + 30
    η θp μ1 Φ2 + 30 η^2 θp μ1 Φ2 + 7 θp μ1^2 Φ2 + 10 η θp μ1^2
    Φ2 + 6 θp μ2 Φ2 + 14 θp μ1 μ2 Φ2 + 20 η θp μ1 μ2 Φ2 + 3 θp
    μ2^2 Φ2 + w^2 (-1 + η)^2 (2 × ((147 + 320 η + 100 η^2) μ1^2 -
          9 (1 + μ2)^2 - 2 μ1 (21 + 13 μ2 + 8 η (3 + μ2))) +
       θp (42 + 72 μ2 + 34 μ2^2 + 9 Φ1 + 18 μ2 Φ1 + 9 μ2^2 Φ1 + 9 Φ2 +
          18 μ2 Φ2 + 9 μ2^2 Φ2 + 36 μ1 (2 + Φ1 + Φ2) + 17 μ1^2 (2 + Φ1 + Φ2) +
          2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2) + 10 η (2 × (3 + 3 μ2 + μ2^2) + 3 μ1
             (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)))) -
    w (-1 + η) × (2 × ((69 + 280 η + 200 η^2) μ1^2 - 9 (1 + μ2)^2 -
          2 μ1 (19 + 20 η^2 + 17 μ2 + 8 η (5 + 2 μ2))) +
       θp (30 + 76 μ2 + 38 μ2^2 + 9 Φ1 + 18 μ2 Φ1 + 9 μ2^2 Φ1 + 9 Φ2 +
          18 μ2 Φ2 + 9 μ2^2 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
          2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2) + 20 η (2 × (3 + 3 μ2 + μ2^2) +
             3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) +
          30 η^2 (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2)))) - w^3
    (-1 + η)^3 (10 × (23 + 24 η) μ1^2 - 6 (1 + μ2)^2 - 4 μ1 (7 + 3 μ2) +
       θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
          2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))) -
x^2 (-1 + η)^2 (2 × (-1 + η) θp (-20 η^3 - 60 η^4 - 42 η^5 - 6 ηt - 9 η ηt - 12
    ηt μ1 - 30 η ηt μ1 - 48 η^2 ηt μ1 - 40 η^3 ηt μ1 - 6 ηt
    μ1^2 + 21 η ηt μ1^2 + 120 η^2 ηt μ1^2 + 100 η^3 ηt μ1^2 - 12 η
    μ2 - 48 η^2 μ2 - 40 η^3 μ2 - 12 ηt μ2 - 18 η ηt μ2 - 12 η μ1
    μ2 - 168 η^2 μ1 μ2 - 440 η^3 μ1 μ2 - 300 η^4 μ1 μ2 - 16 ηt
    μ1 μ2 - 42 η ηt μ1 μ2 - 24 η^2 ηt μ1 μ2 - 6 η μ2^2 - 24 η^2
    μ2^2 - 20 η^3 μ2^2 - 6 ηt μ2^2 - 9 η ηt μ2^2 + 2 w^5 (-1 + η)^5
    (-5 ηt μ1^2 + μ2 ((7 + 15 η) μ1 + μ2)) + 6 w^4 (-1 + η)^4
    (ηt μ1 (3 × (4 + 5 η) μ1 + μ2) - μ2 ((7 + 36 η + 30 η^2) μ1 + 3 η μ2)) + w^3
    (-1 + η)^3 (2 + 8 μ2 + 56 μ1 μ2 + 300 η^3 μ1 μ2 -
       6 μ2^2 + 12 η^2 (1 - 15 ηt μ1^2 + 66 μ1 μ2 + 3 μ2^2) +
       2 ηt (-66 μ1^2 + 3 (1 + μ2)^2 + 5 μ1 (2 + μ2)) +
       η (12 - 345 ηt μ1^2 + 6 × (4 + 83 μ1) μ2 + 42 μ2^2 + 9 ηt (1 + μ2)^2 +
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            6 ηt μ1 (7 + 3 μ2)) ) - w^2 (-1 + η)^2 (150 η^4 μ1 μ2 +
        4 × (3 + 8 μ1 - μ2) μ2 - 20 η^3 (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
        12 η^2 (6 + 6 μ2 + 111 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2)) +
        2 ηt (-41 μ1^2 + 9 (1 + μ2)^2 + 3 μ1 (8 + 9 μ2)) + 3 η (6 + 8 × (3 + 20 μ1)
            μ2 + 12 μ2^2 + ηt (-147 μ1^2 + 9 (1 + μ2)^2 + μ1 (42 + 26 μ2))))) + w
      (-1 + η) × (4 × (1 + μ1) μ2 + 90 η^4 (1 + 5 μ1 μ2) - 20 η^3
          (-6 + 2 ηt μ1 (-1 + 5 μ1) - 2 μ2 - 59 μ1 μ2 - 2 μ2^2) +
        12 η^2 (3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2)) + ηt
          (-6 μ1^2 + 18 (1 + μ2)^2 + μ1 (40 + 54 μ2)) + η (6 μ2 (10 + 30 μ1 + 3 μ2) +
            3 ηt (-69 μ1^2 + 9 (1 + μ2)^2 + μ1 (38 + 34 μ2))))) -
  (-1 + ηt) θl (6 + 24 η + 18 η^2 - 6 θp - 36 η θp - 36 η^2 θp - 40 η^3 θp -
      120 η^4 θp - 84 η^5 θp + 12 μ1 + 48 η μ1 + 60 η^2 μ1 + 64 η^3 μ1 + 40
      η^4 μ1 - 12 θp μ1 - 84 η θp μ1 - 144 η^2 θp μ1 - 120 η^3 θp μ1 - 60
      η^4 θp μ1 + 6 μ1^2 + 24 η μ1^2 - 42 η^2 μ1^2 - 160 η^3 μ1^2 - 100 η^4
      μ1^2 - 6 θp μ1^2 - 48 η θp μ1^2 - 84 η^2 θp μ1^2 - 40 η^3 θp μ1^2 + 12
      μ2 + 48 η μ2 + 36 η^2 μ2 - 12 θp μ2 - 84 η θp μ2 - 144 η^2 θp
      μ2 - 120 η^3 θp μ2 - 60 η^4 θp μ2 + 12 μ1 μ2 + 64 η μ1 μ2 + 84
      η^2 μ1 μ2 + 32 η^3 μ1 μ2 - 12 θp μ1 μ2 - 108 η θp μ1 μ2 - 336
      η^2 θp μ1 μ2 - 520 η^3 θp μ1 μ2 - 300 η^4 θp μ1 μ2 + 6 μ2^2 + 24
      η μ2^2 + 18 η^2 μ2^2 - 6 θp μ2^2 - 48 η θp μ2^2 - 84 η^2 θp μ2^2 - 40
      η^3 θp μ2^2 + 4 w^5 (-1 + η)^5 μ1 ((7 + 10 η) μ1 + μ2) - 12 w^4
      (-1 + η)^4 μ1 ((7 + 24 η + 15 η^2) μ1 + 2 η μ2) - 3 θp Φ1 - 18
      η θp Φ1 - 18 η^2 θp Φ1 - 6 θp μ1 Φ1 - 42 η θp μ1 Φ1 - 72 η^2 θp
      μ1 Φ1 - 60 η^3 θp μ1 Φ1 - 30 η^4 θp μ1 Φ1 - 3 θp μ1^2 Φ1 - 24
      η θp μ1^2 Φ1 - 42 η^2 θp μ1^2 Φ1 - 20 η^3 θp μ1^2 Φ1 - 6 θp μ2
      Φ1 - 36 η θp μ2 Φ1 - 36 η^2 θp μ2 Φ1 - 6 θp μ1 μ2 Φ1 - 48 η
      θp μ1 μ2 Φ1 - 84 η^2 θp μ1 μ2 Φ1 - 40 η^3 θp μ1 μ2 Φ1 - 3 θp
      μ2^2 Φ1 - 18 η θp μ2^2 Φ1 - 18 η^2 θp μ2^2 Φ1 - 3 θp Φ2 - 18 η
      θp Φ2 - 18 η^2 θp Φ2 - 6 θp μ1 Φ2 - 42 η θp μ1 Φ2 - 72 η^2 θp
      μ1 Φ2 - 60 η^3 θp μ1 Φ2 - 30 η^4 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 24
      η θp μ1^2 Φ2 - 42 η^2 θp μ1^2 Φ2 - 20 η^3 θp μ1^2 Φ2 - 6 θp μ2
      Φ2 - 36 η θp μ2 Φ2 - 36 η^2 θp μ2 Φ2 - 6 θp μ1 μ2 Φ2 - 48 η
      θp μ1 μ2 Φ2 - 84 η^2 θp μ1 μ2 Φ2 - 40 η^3 θp μ1 μ2 Φ2 - 3 θp
      μ2^2 Φ2 - 18 η θp μ2^2 Φ2 - 18 η^2 θp μ2^2 Φ2 - w^2 (-1 + η)^2
      (100 η^4 μ1^2 + 8 η (41 μ1^2 - 9 (1 + μ2)^2 - 3 μ1 (8 + 9 μ2)) +
        2 × (5 μ1^2 - 9 (1 + μ2)^2 - 2 μ1 (9 + 17 μ2)) +
        6 η θp (24 + 9 Φ1 + 9 Φ2 + 27 μ1 (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) +
            18 μ2 (3 + Φ1 + Φ2) + μ2^2 (28 + 9 Φ1 + 9 Φ2) +
            2 μ1 μ2 (53 + 14 Φ1 + 14 Φ2)) + θp (9 × (2 + Φ1 + Φ2) +
            24 μ1 (2 + Φ1 + Φ2) + 13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
            μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) +
        4 η^3 (8 μ1 (-3 + 20 μ1 - μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
                3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
        6 η^2 (-9 - 42 μ1 + 147 μ1^2 - 18 μ2 - 26 μ1 μ2 - 9 μ2^2 +
            θp (42 + 9 Φ1 + 9 Φ2 + 36 μ1 (2 + Φ1 + Φ2) +
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                17 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (4 + Φ1 + Φ2) +
                μ2^2 (34 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2)))) + w
        (-1 + η) × (-6 × (3 μ1^2 + 3 (1 + μ2)^2 + μ1 (6 + 8 μ2)) +
          8 η (3 μ1^2 - 9 (1 + μ2)^2 - μ1 (20 + 27 μ2)) +
          10 η^4 (4 μ1 (-1 + 5 μ1) + 6 θp (3 + μ2) + 3 θp μ1 (2 + 10 μ2 + Φ1 + Φ2)) +
          6 η θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
             13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
             μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) +
          8 η^3 (2 μ1 (-10 + 35 μ1 - 4 μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
                3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
          6 η^2 (-9 - 38 μ1 + 69 μ1^2 - 18 μ2 - 34 μ1 μ2 - 9 μ2^2 + θp
               (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
                2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
                2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2))) + θp (11 μ1^2 (2 + Φ1 + Φ2) +
             (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
             μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2)))) + w^3
        (-1 + η)^3 (78 μ1^2 + 240 η^3 μ1^2 - 6 (1 + μ2)^2 - 12 μ1 (1 + 3 μ2) +
          8 η (66 μ1^2 - 3 (1 + μ2)^2 - 5 μ1 (2 + μ2)) +
          θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
             2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
          6 η θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
             2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
          6 η^2 (115 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (7 + 3 μ2) + θp
               (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) +
    2 x^3 (-1 + η)^3 ((-1 + η) θp (-20 η^2 - 80 η^3 - 70 η^4 - 3 ηt - 10 ηt μ1 - 32
        η ηt μ1 - 40 η^2 ηt μ1 + 7 ηt μ1^2 + 80 η ηt μ1^2 + 100 η^2 ηt μ1^2 - 4
        μ2 - 32 η μ2 - 40 η^2 μ2 - 6 ηt μ2 - 4 μ1 μ2 + 10 w^5 (-1 + η)^5
        μ1 μ2 - 112 η μ1 μ2 - 440 η^2 μ1 μ2 - 400 η^3 μ1 μ2 - 14 ηt μ1
        μ2 - 16 η ηt μ1 μ2 - 2 μ2^2 - 16 η μ2^2 - 20 η^2 μ2^2 - 3 ηt μ2^2 - 6 w^4
        (-1 + η)^4 (-5 ηt μ1^2 + μ2 (4 × (3 + 5 η) μ1 + μ2)) + w^3 (-1 + η)^3
        (4 - 115 ηt μ1^2 + 300 η^2 μ1 μ2 + 2 × (4 + 83 μ1) μ2 + 14 μ2^2 + 3 ηt (1 + μ2)^2 +
          2 ηt μ1 (7 + 3 μ2) + 8 η (1 - 15 ηt μ1^2 + 66 μ1 μ2 + 3 μ2^2)) - w^2
        (-1 + η)^2 (6 + 200 η^3 μ1 μ2 + 8 × (3 + 20 μ1) μ2 + 12 μ2^2 -
          20 η^2 (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
          8 η (6 + 6 μ2 + 111 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2)) +
          ηt (-147 μ1^2 + 9 (1 + μ2)^2 + μ1 (42 + 26 μ2))) + w
        (-1 + η) × (2 μ2 (10 + 30 μ1 + 3 μ2) + 120 η^3 (1 + 5 μ1 μ2) -
          20 η^2 (-6 + 2 ηt μ1 (-1 + 5 μ1) - 2 μ2 - 59 μ1 μ2 - 2 μ2^2) +
          8 η (3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2)) +
          ηt (-69 μ1^2 + 9 (1 + μ2)^2 + μ1 (38 + 34 μ2)))) -
      (-1 + ηt) θl (6 + 9 η - 6 θp - 12 η θp - 20 η^2 θp - 80 η^3 θp - 70 η^4
        θp + 12 μ1 + 30 η μ1 + 48 η^2 μ1 + 40 η^3 μ1 - 14 θp μ1 - 48 η
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θp μ1 - 60 η^2 θp μ1 - 40 η^3 θp μ1 + 6 μ1^2 + 10 w^5 (-1 + η)^5
μ1^2 - 21 η μ1^2 - 120 η^2 μ1^2 - 100 η^3 μ1^2 - 8 θp μ1^2 - 28 η
θp μ1^2 - 20 η^2 θp μ1^2 + 12 μ2 + 18 η μ2 - 14 θp μ2 - 48 η θp
μ2 - 60 η^2 θp μ2 - 40 η^3 θp μ2 + 16 μ1 μ2 + 42 η μ1 μ2 + 24 η^2
μ1 μ2 - 18 θp μ1 μ2 - 112 η θp μ1 μ2 - 260 η^2 θp μ1 μ2 - 200
η^3 θp μ1 μ2 + 6 μ2^2 + 9 η μ2^2 - 8 θp μ2^2 - 28 η θp μ2^2 - 20 η^2 θp
μ2^2 - 6 w^4 (-1 + η)^4 μ1 (3 × (4 + 5 η) μ1 + μ2) - 3 θp Φ1 - 6 η
θp Φ1 - 7 θp μ1 Φ1 - 24 η θp μ1 Φ1 - 30 η^2 θp μ1 Φ1 - 20 η^3 θp
μ1 Φ1 - 4 θp μ1^2 Φ1 - 14 η θp μ1^2 Φ1 - 10 η^2 θp μ1^2 Φ1 - 6 θp
μ2 Φ1 - 12 η θp μ2 Φ1 - 8 θp μ1 μ2 Φ1 - 28 η θp μ1 μ2 Φ1 - 20
η^2 θp μ1 μ2 Φ1 - 3 θp μ2^2 Φ1 - 6 η θp μ2^2 Φ1 - 3 θp Φ2 - 6 η
θp Φ2 - 7 θp μ1 Φ2 - 24 η θp μ1 Φ2 - 30 η^2 θp μ1 Φ2 - 20 η^3 θp
μ1 Φ2 - 4 θp μ1^2 Φ2 - 14 η θp μ1^2 Φ2 - 10 η^2 θp μ1^2 Φ2 - 6 θp
μ2 Φ2 - 12 η θp μ2 Φ2 - 8 θp μ1 μ2 Φ2 - 28 η θp μ1 μ2 Φ2 - 20
η^2 θp μ1 μ2 Φ2 - 3 θp μ2^2 Φ2 - 6 η θp μ2^2 Φ2 - w^2 (-1 + η)^2
(82 μ1^2 + 100 η^3 μ1^2 - 18 (1 + μ2)^2 - 6 μ1 (8 + 9 μ2) + θp (24 + 9 Φ1 + 9 Φ2 +
      27 μ1 (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (3 + Φ1 + Φ2) +
      μ2^2 (28 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (53 + 14 Φ1 + 14 Φ2)) +
  2 η^2 (12 μ1 (-3 + 20 μ1 - μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
        3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
  η (441 μ1^2 - 27 (1 + μ2)^2 - 6 μ1 (21 + 13 μ2) + 2 θp (42 + 9 Φ1 + 9 Φ2 +
        36 μ1 (2 + Φ1 + Φ2) + 17 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (4 + Φ1 + Φ2) +
        μ2^2 (34 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2))) + w
(-1 + η) × (6 μ1^2 - 18 (1 + μ2)^2 - 2 μ1 (20 + 27 μ2) + 20 η^3
    (2 μ1 (-1 + 5 μ1) + 2 θp (3 + μ2) + θp μ1 (2 + 10 μ2 + Φ1 + Φ2)) +
  θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
      13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
      μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) +
  4 η^2 (3 μ1 (-10 + 35 μ1 - 4 μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
        3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
  η (3 × (69 μ1^2 - 9 (1 + μ2)^2 - 2 μ1 (19 + 17 μ2)) + 2 θp
      (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
        2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
        2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2))) + w^3
(-1 + η)^3 (132 μ1^2 + 180 η^2 μ1^2 - 6 (1 + μ2)^2 - 10 μ1 (2 + μ2) +
  5 θp μ1^2 (2 + Φ1 + Φ2) + θp (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
  2 θp μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)) +
  η (345 μ1^2 - 9 (1 + μ2)^2 - 6 μ1 (7 + 3 μ2) +
      2 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
        2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) -
θp (4 w^5 (-1 + η)^6 (-η t μ1 + η μ2) (5 η^2 μ1 - μ2 + η (7 μ1 + μ2)) -
  12 w^4 (-1 + η)^5 (1 + η) (-η t μ1 + η μ2)
    (5 η^2 μ1 - μ2 + η (7 μ1 + μ2)) -
  η (1 + η)^2 (4 η^5 - 6 η t (1 + μ1 + μ2)^2 + η^4 (-4 - 4 × (-1 + η t) θl + 40 μ1 μ2) +
      η (3 θl (1 + μ1 + μ2)^2 (2 + Φ1 + Φ2) + η t (6 μ1^2 + 6 (1 + μ2)^2 +
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$$4\,\mu1\,(3+\mu2)-3\,\theta l\,(1+\mu1+\mu2)^2\,(2+\Phi1+\Phi2)\big)\big)+2$$
$$\eta^3\,\big(2\,\theta l\,\mu2+2\,\mu2\,(2-8\,\mu1+\mu2)+\theta l\,\mu1\,(2+10\,\mu2+\Phi1+\Phi2)-$$
$$\eta t\,\big(10\,\mu1^2+2\,\theta l\,\mu2+\mu1\,(-4+\theta l\,(2+10\,\mu2+\Phi1+\Phi2))\big)\big)-2$$
$$\eta^2\,\big(2\,\mu2\,(2+2\,\mu1+\mu2)-\theta l\,\big(2\,\mu2\,(1+\mu2)+\mu1^2\,(2+\Phi1+\Phi2)+$$
$$\mu1\,(2+\Phi1+\Phi2+2\,\mu2\,(3+\Phi1+\Phi2))\big)+$$
$$\eta t\,\big(2\,\theta l\,\mu2\,(1+\mu2)+\mu1^2\,(-10+\theta l\,(2+\Phi1+\Phi2))+$$
$$\mu1\,(4-4\,\mu2+\theta l\,(2+\Phi1+\Phi2+2\,\mu2\,(3+\Phi1+\Phi2)))\big)\big)\big)+$$
$$w^3\,(-1+\eta)^3\,\big(60\,\eta^6\,\mu1\,\mu2-12\,\eta t\,\mu1\,\mu2+\eta^5\,\big(4-60\,\eta t\,\mu1^2+204\,\mu1\,\mu2+$$
$$12\,\mu2^2\big)+6\,\eta\,\big(2\,\mu2^2+\eta t\,\big(13\,\mu1^2-(1+\mu2)^2-2\,\mu1\,(1+2\,\mu2)\big)\big)-\eta^2$$
$$\big(4+16\times(1+7\,\mu1)\,\mu2-\theta l\,\big(5\,\mu1^2\,(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+$$
$$3\,\Phi1+3\,\Phi2)+2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)+$$
$$\eta t\,\big(-186\,\mu1^2+6\,(1+\mu2)^2-4\,\mu1\,(-7+4\,\mu2)+5\,\theta l\,\mu1^2$$
$$(2+\Phi1+\Phi2)+\theta l\,(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+$$
$$2\,\theta l\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)\big)-2\,\eta^3$$
$$\big(2+110\,\mu1\,\mu2+20\,\mu2^2-\theta l\,\big(5\,\mu1^2\,(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+$$
$$3\,\Phi1+3\,\Phi2)+2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)+$$
$$\eta t\,\big(17\,\mu1^2-3\,(1+\mu2)^2-2\,\mu1\,(3+2\,\mu2)+\theta l\,\big(5\,\mu1^2$$
$$(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+$$
$$2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)\big)\big)+$$
$$\eta^4\,\big(4+4\times(4+17\,\mu1)\,\mu2+16\,\mu2^2+5\,\theta l\,\mu1^2\,(2+\Phi1+\Phi2)+$$
$$\theta l\,(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+2\,\theta l\,\mu1\,(5\times(2+\Phi1+\Phi2)+$$
$$\mu2\,(22+5\,\Phi1+5\,\Phi2))-\eta t\,\big(170\,\mu1^2-6\,(1+\mu2)^2-4\,\mu1\,(7+3\,\mu2)+$$
$$\theta l\,\big(5\,\mu1^2\,(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+$$
$$2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)\big)\big)\big)-$$
$$w^2\,(-1+\eta)^2\,(1+\eta)\times\big(20\,\eta^6\,\mu1\,\mu2-4\,\eta t\,\mu1\,\mu2+4\,\eta^5\,\big(3-5\,\eta t\,\mu1^2+$$
$$42\,\mu1\,\mu2+\mu2^2\big)+2\,\eta\,\big(2\,\mu2^2+\eta t\,\big(5\,\mu1^2-9\,(1+\mu2)^2-6\,\mu1\,(3+5\,\mu2)\big)\big)-$$
$$2\,\eta^4\,\big(4\,\eta t\,\mu1\,(-3+15\,\mu1-\mu2)-2\,\mu2\,(6+17\,\mu1+6\,\mu2)+$$
$$(-1+\eta t)\,\theta l\,\big(2\times\big(3+3\,\mu2+\mu2^2\big)+3\,\mu1\,(2+\Phi1+\Phi2)+$$
$$\mu1^2\,(2+\Phi1+\Phi2)+2\,\mu1\,\mu2\,(13+\Phi1+\Phi2)\big)\big)+\eta^2$$
$$\big(-8\times(3+8\,\mu1)\,\mu2+4\,\eta t\,\mu1\,(-6+36\,\mu1+5\,\mu2)-(-1+\eta t)\,\theta l$$
$$\big(9\times(2+\Phi1+\Phi2)+24\,\mu1\,(2+\Phi1+\Phi2)+13\,\mu1^2\,(2+\Phi1+\Phi2)+$$
$$6\,\mu2\,(8+3\,\Phi1+3\,\Phi2)+\mu2^2\,(26+9\,\Phi1+9\,\Phi2)+$$
$$\mu1\,\mu2\,(80+26\,\Phi1+26\,\Phi2)\big)\big)+\eta^3\,\big(-4\times\big(3+48\,\mu1\,\mu2+8\,\mu2^2\big)+$$
$$3\,\theta l\,\big(5\,\mu1^2\,(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+$$
$$2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)-$$
$$\eta t\,\big(2\times\big(7\,\mu1^2-18\,\mu1\,(1+\mu2)-9\,(1+\mu2)^2\big)+3\,\theta l$$
$$\big(5\,\mu1^2\,(2+\Phi1+\Phi2)+(1+\mu2)^2\,(10+3\,\Phi1+3\,\Phi2)+$$
$$2\,\mu1\,(5\times(2+\Phi1+\Phi2)+\mu2\,(22+5\,\Phi1+5\,\Phi2))\big)\big)\big)\big)+w\,(-1+\eta)$$
$$\eta\,\big(12\,\eta^6\,(1+5\,\mu1\,\mu2)-6\,\eta t\,\big(3\,\mu1^2+3\,(1+\mu2)^2+\mu1\,(6+8\,\mu2)\big)-$$
$$4\,\eta^4\,\big(3-8\,\eta t\,\mu1+25\,\eta t\,\mu1^2-8\,\mu2-15\,\mu1\,\mu2-4\,\eta t\,\mu1\,\mu2-5\,\mu2^2+$$
$$(-1+\eta t)\,\theta l\,\big(2\times\big(3+3\,\mu2+\mu2^2\big)+3\,\mu1\,(2+\Phi1+\Phi2)+$$
$$\mu1^2\,(2+\Phi1+\Phi2)+2\,\mu1\,\mu2\,(13+\Phi1+\Phi2)\big)\big)-2$$
$$\eta^5\,\big(4\,\eta t\,\mu1\,(-1+5\,\mu1)-2\times\big(3+2\,\mu2+44\,\mu1\,\mu2+2\,\mu2^2\big)+$$

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                (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))) + η^3
            (-4 × (3 + 44 μ1 μ2 + 4 μ2^2) + 2 ηt (μ1^2 + 9 (1 + μ2)^2 + 2 μ1 (9 + 13 μ2)) +
              θl (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
                  2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
                  2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2)) - ηt θl (30 + 9 Φ1 + 9 Φ2 +
                  38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) + 2 μ2 (38 + 9 Φ1 + 9 Φ2) +
                  μ2^2 (38 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2))) - 2 η^2
            (2 μ2 (8 + 28 μ1 + 3 μ2) - θl (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
                  13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) +
                  μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) + ηt (-9 - 2 μ1 - 63 μ1^2 - 18 μ2 -
                  20 μ1 μ2 - 9 μ2^2 + θl (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
                      13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
                      μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)))) - η
            (8 × (1 + μ1) μ2 - θl (11 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2) ×
                  (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                  μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2))) +
              ηt (-30 μ1^2 + 18 (1 + μ2)^2 + μ1 (44 + 60 μ2) + θl (11 μ1^2 (2 + Φ1 + Φ2) +
                      (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                      μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2))))))) +
2 x (-1 + η) × (30 × (-2 + w) (-1 + w)^2 w^2 η^8 θp μ1 μ2 - (1 + w)^3
      (2 w^2 ηt θl μ1 μ2 + 2 w^2 μ2 (-θl μ1 + θp μ2) + ηt θp
          ((-3 + 14 w^2) μ1^2 - 3 (1 + μ2)^2 + 2 μ1 (-3 + (-3 - 3 w + w^2) μ2))) -
    2 × (-1 + w) η^7 (5 (-1 + w)^2 w^2 (-1 + ηt) θl μ1^2 + θp
          (-7 + w (11 + 90 μ1 μ2) + w^2 (-4 + 25 ηt μ1^2 - 80 μ1 μ2 - 5 μ2^2) +
            2 w^4 (5 ηt μ1^2 + 38 μ1 μ2 - μ2^2) + w^3 (-35 ηt μ1^2 - 116 μ1 μ2 + 7 μ2^2))) -
    η^2 (θp (-6 μ2 (2 + 2 μ1 + μ2) + ηt (33 μ1^2 + 3 (1 + μ2)^2 - 2 μ1 (3 + 5 μ2)) -
            6 w^4 (5 ηt μ1 (7 μ1 + 2 μ2) - μ2 (34 μ1 + 7 μ2)) +
            6 w^5 (5 ηt μ1 (3 μ1 + μ2) + μ2 (23 μ1 + 9 μ2)) + w^3 (4 + 40 μ2 - 50 μ1 μ2 -
                54 μ2^2 + ηt (-477 μ1^2 + μ1 (82 - 46 μ2) + 21 (1 + μ2)^2)) -
            18 w^2 (1 + 16 μ1 μ2 + 3 μ2^2 + ηt (2 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (3 + 4 μ2))) +
            2 w (-μ2 (22 + 82 μ1 + 9 μ2) + ηt (87 μ1^2 + 18 (1 + μ2)^2 +
                    μ1 (14 + 45 μ2)))) + (-1 + ηt) θl (6 μ1^2 + 6 (1 + μ2)^2 +
            30 w^5 μ1 (2 μ1 + μ2) + 4 μ1 (3 + 4 μ2) + 6 w^4 μ1 (16 μ1 + 5 μ2) -
            w^3 (15 μ1^2 + 3 (1 + μ2)^2 + μ1 (-2 + 26 μ2)) - 3 θp (4 μ1^2 (2 + Φ1 + Φ2) +
                (1 + μ2) × (3 × (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)) +
                μ1 (7 × (2 + Φ1 + Φ2) + 2 μ2 (9 + 4 Φ1 + 4 Φ2))) - w (-9 - 22 μ1 +
                15 μ1^2 - 18 μ2 - 30 μ1 μ2 - 9 μ2^2 + 2 θp (9 × (2 + Φ1 + Φ2) + 26 μ1
                    (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) + 4 μ1 μ2 (24 + 7 Φ1 + 7 Φ2) +
                    2 μ2 (26 + 9 Φ1 + 9 Φ2) + μ2^2 (28 + 9 Φ1 + 9 Φ2))) -
            w^2 (12 μ1 (-1 + 6 μ1 + μ2) + θp (33 μ1 (2 + Φ1 + Φ2) + 16 μ1^2
                    (2 + Φ1 + Φ2) + 9 × (4 + Φ1 + Φ2) + 6 μ2 (11 + 3 Φ1 + 3 Φ2) +
                    μ2^2 (32 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (79 + 16 Φ1 + 16 Φ2)))) +
    η^6 (2 θp (-5 + 7 × (-1 + ηt) θl - 60 μ1 μ2) - 6 w^4 (ηt θp μ1 (51 μ1 - 2 μ2) +
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        (-1 + ηt) θl μ1 (8 μ1 - μ2) + θp (34 μ1 - 15 μ2) μ2) + 2
      w^5 ((-1 + ηt) θl μ1 (18 μ1 - μ2) + ηt θp μ1 (53 μ1 - μ2) +
        θp (141 μ1 - 13 μ2) μ2) + w^2 (4 × (-1 + ηt) θl μ1 (-3 + 15 μ1 - μ2) +
        θp (42 - 48 μ2 + 492 μ1 μ2 - 34 μ2^2 + 2 ηt μ1 (85 μ1 - 8 × (3 + μ2)) +
            5 × (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) + 3 μ1 (2 + Φ1 + Φ2) +
                μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) - 2 w
      (2 × (-1 + ηt) θl μ1 (-1 + 5 μ1) + θp (6 + 10 ηt μ1 (-1 + 5 μ1) -
            10 μ2 - 115 μ1 μ2 - 10 μ2^2 + 3 × (-1 + ηt) θl (2 × (3 + μ2) +
                μ1 (2 + 10 μ2 + Φ1 + Φ2))) + w^3 (θp (-20 + (24 - 714 μ1) μ2 -
            54 μ2^2 + 3 ηt (45 μ1^2 + 3 (1 + μ2)^2 + 2 μ1 (7 + 3 μ2))) -
        (-1 + ηt) θl (25 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (7 + 3 μ2) +
            2 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) +
  η^3 (-θp (-10 μ2 (2 + 10 μ1 + μ2) + 30 w^4 (μ2 (4 μ1 + μ2) + ηt μ1
                (19 μ1 + 4 μ2)) + 20 w^5 (ηt μ1 (μ1 - 2 μ2) - μ2 (12 μ1 + 5 μ2)) +
        ηt (59 μ1^2 + 9 (1 + μ2)^2 + μ1 (-2 + 26 μ2)) + 8 w^3
            (2 + 99 μ1 μ2 + 24 μ2^2 + 3 ηt (7 μ1^2 + μ1 (-2 + μ2) - (1 + μ2)^2)) -
        6 w^2 (-1 - 4 × (4 + 15 μ1) μ2 - 11 μ2^2 + ηt (86 μ1^2 + 3 (1 + μ2)^2 +
                2 μ1 (-5 + 6 μ2))) + w (-4 × (6 + (-8 + 60 μ1) μ2 + 5 μ2^2) +
            2 ηt (-61 μ1^2 + 9 (1 + μ2)^2 + μ1 (34 + 32 μ2)))) +
      (-1 + ηt) θl (-3 - 10 μ1 + 7 μ1^2 - 6 w^4 μ1^2 - 6 μ2 - 14 μ1 μ2 -
        3 μ2^2 + 10 w^5 μ1 (9 μ1 + 4 μ2) + 2 θp (3 × (2 + Φ1 + Φ2) +
            7 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (4 + Φ1 + Φ2) + μ2^2 (14 + 3 Φ1 + 3 Φ2) +
            2 μ1 (6 × (2 + Φ1 + Φ2) + 7 μ2 (4 + Φ1 + Φ2))) -
        w (-9 - 2 μ1 - 63 μ1^2 - 18 μ2 - 20 μ1 μ2 - 9 μ2^2 + θp
                (-6 + 9 Φ1 + 9 Φ2 + 2 μ1 μ2 (-76 + Φ1 + Φ2) - 4 μ1 (2 + Φ1 + Φ2) + μ1^2
                    (2 + Φ1 + Φ2) + 2 μ2 (-4 + 9 Φ1 + 9 Φ2) + μ2^2 (2 + 9 Φ1 + 9 Φ2))) -
        w^2 (6 × (2 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (3 + 4 μ2)) + θp
                (66 μ1 (2 + Φ1 + Φ2) + 37 μ1^2 (2 + Φ1 + Φ2) +
                    3 × (14 + 9 Φ1 + 9 Φ2) + 6 μ2 (22 + 9 Φ1 + 9 Φ2) +
                    μ2^2 (74 + 27 Φ1 + 27 Φ2) + 2 μ1 μ2 (94 + 37 Φ1 + 37 Φ2))) -
        2 w^3 (82 μ1^2 - 3 (1 + μ2)^2 + 2 μ1 (-7 + 6 μ2) + 2 θp
                (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                    2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) -
  η^5 (6 w^5 ((-1 + ηt) θl μ1 (5 μ1 - 2 μ2) + 2 ηt θp μ1 (18 μ1 - μ2) +
        6 θp (5 μ1 - 2 μ2) μ2) + 6 w^4
      ((-1 + ηt) θl μ1 (11 μ1 + 4 μ2) + ηt θp μ1 (-37 μ1 + 10 μ2) +
        θp μ2 (90 μ1 + 29 μ2)) - 2 ((-1 + ηt) θl μ1 (-2 + 5 μ1) +
        θp (7 + 5 ηt μ1 (-2 + 5 μ1) - 10 μ2 - 50 μ1 μ2 - 5 μ2^2 +
            3 × (-1 + ηt) θl (2 × (2 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))) - 3
      w^2 (θp (6 × (2 + (4 + 38 μ1) μ2 + 7 μ2^2) - ηt (123 μ1^2 +
                9 (1 + μ2)^2 + 2 μ1 (-3 + 5 μ2))) + (-1 + ηt) θl
            (-μ1^2 - 6 μ1 (1 + μ2) - 3 (1 + μ2)^2 + 2 θp (4 + 3 Φ1 + 3 Φ2 +
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                7 μ1 (2 + Φ1 + Φ2) + 4 μ1^2 (2 + Φ1 + Φ2) + 2 μ2 (7 + 3 Φ1 + 3 Φ2) +
                μ2^2 (8 + 3 Φ1 + 3 Φ2) + 2 μ1 μ2 (9 + 4 Φ1 + 4 Φ2)))) + 2
        w ((-1 + ηt) θl μ1 (25 μ1 - 4 × (2 + μ2)) + θp (30 - 20 ηt μ1 +
            40 ηt μ1^2 - 20 μ2 + 204 μ1 μ2 - 16 ηt μ1 μ2 - 8 μ2^2 +
            (-1 + ηt) θl (2 × (6 + 12 μ2 + 5 μ2^2) + 5 μ1^2 (2 + Φ1 + Φ2) +
                2 μ1 (6 × (2 + Φ1 + Φ2) + 5 μ2 (10 + Φ1 + Φ2))))) +
      w^3 (4 θp (-1 - 4 × (-5 + 43 μ1) μ2 + 9 μ2^2 + ηt (-99 μ1^2 +
                6 (1 + μ2)^2 + μ1 (32 + 13 μ2))) -
          (-1 + ηt) θl (123 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (11 + 4 μ2) +
            3 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) +
  η (θp (4 w^3 (1 + ηt μ1 (4 - 27 μ1 - 13 μ2) + 4 μ2 + 28 μ1 μ2 + 3 μ2^2) +
        4 w^5 (ηt μ1 (16 μ1 + 3 μ2) + μ2 (7 μ1 + 4 μ2)) +
        6 w^4 (ηt μ1 (11 μ1 - 2 μ2) + μ2 (14 μ1 + 5 μ2)) +
        ηt (9 μ1^2 + 9 (1 + μ2)^2 + 2 μ1 (9 + 13 μ2)) + w^2 (2 × (12 + 32 μ1 - μ2) μ2 +
            ηt (-149 μ1^2 + 9 (1 + μ2)^2 + 6 μ1 (7 + μ2))) +
        w (8 × (1 + μ1) μ2 + ηt (-30 μ1^2 + 18 (1 + μ2)^2 + μ1 (44 + 60 μ2)))) +
      (-1 + ηt) θl (6 w^4 μ1 (7 μ1 + 4 μ2) + 2 w^5 μ1 (7 μ1 + 6 μ2) +
        3 (1 + μ1 + μ2)^2 (-1 + θp (2 + Φ1 + Φ2)) +
        w^2 (-9 - 18 μ1 + 5 μ1^2 - 18 μ2 - 30 μ1 μ2 - 9 μ2^2 +
            θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) + 13 μ1^2 (2 + Φ1 + Φ2) +
                6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2
                 (80 + 26 Φ1 + 26 Φ2))) + w^3 (-6 μ1 + 39 μ1^2 - 3 (1 + μ2)^2 +
            θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)))) +
        w (-3 × (3 μ1^2 + 3 (1 + μ2)^2 + μ1 (6 + 8 μ2)) + θp (11 μ1^2 (2 + Φ1 + Φ2) +
                (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2))))))) +
  η^4 (10 θp - 10 θl θp + 10 ηt θl θp + 8 θl μ1 - 8 ηt θl μ1 - 12 ηt θp
      μ1 - 30 θl θp μ1 + 30 ηt θl θp μ1 - 20 θl μ1^2 + 20 ηt θl
      μ1^2 + 30 ηt θp μ1^2 - 10 θl θp μ1^2 + 10 ηt θl θp μ1^2 - 12 θp
      μ2 - 30 θl θp μ2 + 30 ηt θl θp μ2 + 4 θl μ1 μ2 - 4 ηt θl μ1
      μ2 + 108 θp μ1 μ2 - 16 ηt θp μ1 μ2 - 130 θl θp μ1 μ2 + 130
      ηt θl θp μ1 μ2 - 6 θp μ2^2 - 10 θl θp μ2^2 + 10 ηt θl θp
      μ2^2 - 10 w^5 (11 θp μ2 (μ1 + μ2) + ηt θp μ1 (-19 μ1 + 3 μ2) +
          (-1 + ηt) θl μ1 (4 μ1 + 3 μ2)) + 6 w^4 ((-1 + ηt) θl μ1 (24 μ1 + 5 μ2) +
          5 θp (ηt μ1 (11 μ1 + 4 μ2) + μ2 (24 μ1 + 5 μ2))) - 15
      θl θp μ1 Φ1 + 15 ηt θl θp μ1 Φ1 - 5 θl θp μ1^2 Φ1 + 5 ηt θl
      θp μ1^2 Φ1 - 10 θl θp μ1 μ2 Φ1 + 10 ηt θl θp μ1 μ2
      Φ1 - 15 θl θp μ1 Φ2 + 15 ηt θl θp μ1 Φ2 - 5 θl θp μ1^2
      Φ2 + 5 ηt θl θp μ1^2 Φ2 - 10 θl θp μ1 μ2 Φ2 + 10 ηt θl
      θp μ1 μ2 Φ2 + w^3 (θp (24 + (80 + 578 μ1) μ2 + 198 μ2^2 +
              ηt (-573 μ1^2 + 9 (1 + μ2)^2 + μ1 (98 + 46 μ2))) +
          2 × (-1 + ηt) θl (21 μ1^2 + 3 μ1 (-2 + μ2) - 3 (1 + μ2)^2 +
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                5 θp μ1^2 (2 + Φ1 + Φ2) + θp (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 θp μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) + w
            (θp (12 + 253 ηt μ1^2 - 2 × (40 + 207 μ1) μ2 - 74 μ2^2 + 27 ηt (1 + μ2)^2 +
                ηt μ1 (-26 + 38 μ2)) - (-1 + ηt) θl (-9 + 18 θp (Φ1 + Φ2) +
                μ1^2 (-1 + 28 θp (2 + Φ1 + Φ2)) + 2 μ2 (-9 + 2 θp (23 + 9 Φ1 + 9 Φ2)) +
                μ2^2 (-9 + 2 θp (28 + 9 Φ1 + 9 Φ2)) + 2 μ1
                 (-9 - 13 μ2 + 23 θp (2 + Φ1 + Φ2) + θp μ2 (66 + 28 Φ1 + 28 Φ2))) -
          3 w^2 (2 × (-1 + ηt) θl μ1 (-4 + 22 μ1 + μ2) + θp (20 - 16 μ2 +
                256 μ1 μ2 + 22 μ2^2 - θl (22 + 3 Φ1 + 3 Φ2 + 7 μ1^2 (2 + Φ1 + Φ2) +
                    μ2^2 (14 + 3 Φ1 + 3 Φ2) + μ2 (32 + 6 Φ1 + 6 Φ2) +
                    2 μ1 (8 × (2 + Φ1 + Φ2) + μ2 (48 + 7 Φ1 + 7 Φ2))) + ηt (83 μ1^2 -
                    15 (1 + μ2)^2 - 2 μ1 (23 + 13 μ2) + θl (22 + 3 Φ1 + 3 Φ2 + 7 μ1^2 (2 +
                          Φ1 + Φ2) + μ2^2 (14 + 3 Φ1 + 3 Φ2) + μ2 (32 + 6 Φ1 + 6 Φ2) +
                       2 μ1 (8 × (2 + Φ1 + Φ2) + μ2 (48 + 7 Φ1 + 7 Φ2)))))))))) /
  (96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
    (w +
      x +
      η -
      w η -
      x η)^3 (-1 + ηt) θp))

βuκ =
 - ((uκ (cv cσ (w (-1 + η) + x (-1 + η) - η) (-1 + η) (x^2 (-1 + η)^2 + η (1 + η) + x (1 + η - 2 η^2))^2
          ((x + η - x η)^2 (-1 + ηt) θl θp (1 + μ1) × (14 x (-1 + η) - 14 η - 5 × (2 + Φ1 + Φ2)) +
            w (-1 + η) × (-4 x^3 (-1 + η)^3 θp (1 - 8 θl + 7 μ1 - 14 θl μ1 + 3 η^2 (1 + μ1) -
                η ηt (1 + 2 θl) × (1 + μ1) + 2 η (-2 + θl - 5 μ1 + θl μ1) +
                ηt (1 + 8 θl + μ1 + 14 θl μ1)) + x^2 (-1 + η)^2 θp (36 η^3 (1 + μ1) -
                12 η^2 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-2 + θl - 5 μ1 + θl μ1)) +
                12 η (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 + 2 θl (4 + 7 μ1))) +
                (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2)) -
              x (-1 + η) × (12 × (-1 + η) η^2 θp (-1 - 7 μ1 + 3 η (1 + μ1) - ηt (1 + μ1)) -
                (-1 + ηt) θl (20 × (1 + μ1) + θp (24 η^3 (1 + μ1) - 24 η^2 (4 + 7 μ1) +
                      5 × (-6 - 3 Φ1 + Φ2) - 2 η (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) -
                      μ1 (30 + 15 Φ1 + 19 Φ2))) + θp (12 η^5 (1 + μ1) + 20 ηt (1 + μ1) -
                4 η^4 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-2 + θl - 5 μ1 + θl μ1)) +
                4 η^3 (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 + 2 θl (4 + 7 μ1))) +
                η^2 (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) +
                η (-20 ηt (1 + μ1) - 5 θl (6 + 3 Φ1 - Φ2) - θl μ1 (30 + 15 Φ1 + 19 Φ2) +
                    ηt θl (5 × (6 + 3 Φ1 - Φ2) + μ1 (30 + 15 Φ1 + 19 Φ2))))) + w^4 (-1 + η)^4
            (x (-1 + η) × (4 × (-1 + η) θp (1 - 5 μ1 + η (1 + μ1) - ηt (1 + μ1)) + (-1 + ηt)
                  θl (-20 × (1 + μ1) + 5 θp (8 + 3 Φ1 - Φ2) + θp μ1 (64 + 15 Φ1 + 19 Φ2))) +
              θp (-4 η^3 (1 + μ1) - 20 ηt (1 + μ1) + 4 η^2 (ηt + 6 μ1 + ηt μ1) + η (4 - 20 μ1 +
                  16 ηt (1 + μ1) + θl (40 + 64 μ1 + 15 Φ1 + 15 μ1 Φ1 - 5 Φ2 + 19 μ1 Φ2) -
                  ηt θl (5 × (8 + 3 Φ1 - Φ2) + μ1 (64 + 15 Φ1 + 19 Φ2))))) +
          w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (-2 - 5 θl + 10 μ1 - 17 θl μ1 + 2 η^2
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        (1 + μ1) - 2 η (ηt + 6 μ1 + ηt μ1) + ηt (2 + 5 θl + 2 μ1 + 17 θl μ1)) -
    x^2 (-1 + η)^2 θp (8 - 94 θl + 56 μ1 - 142 θl μ1 + 12 η^3 (1 + μ1) +
      8 ηt (1 + μ1) - 12 η^2 (-2 + ηt + 4 μ1 + ηt μ1) +
      2 η (-22 - 7 θl - 10 μ1 - 43 θl μ1 + ηt (2 + 7 θl + 2 μ1 + 43 θl μ1)) -
      15 θl Φ1 - 15 θl μ1 Φ1 - 15 θl Φ2 - 15 θl μ1 Φ2 +
      ηt θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))) +
    x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) - 3 η (-5 + ηt + μ1 + ηt μ1) -
        4 × (1 + ηt + 7 μ1 + ηt μ1)) + (-1 + ηt) θl (-60 × (1 + μ1) +
        θp (104 + η^2 (-2 + 70 μ1) + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2) +
          2 η (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))))) +
    θp (-4 η^5 (1 + μ1) - 60 ηt (1 + μ1) + 4 η^4 (-6 + ηt + ηt μ1) +
      η^3 (36 + 60 μ1 + 6 θl (-1 + 3 μ1) + ηt (4 + 6 θl + 4 μ1 - 18 θl μ1)) +
      η (60 ηt (1 + μ1) + θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2)) -
        ηt θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2))) - η^2 (8 +
        56 μ1 - θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)) + ηt (8 × (1 +
            μ1) + θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))))) +
  w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (-8 - 30 θl + 40 μ1 - 78 θl μ1 + 8 η^2 (1 + μ1) -
      8 η (ηt + 6 μ1 + ηt μ1) - 5 θl Φ1 - 5 θl μ1 Φ1 - 5 θl Φ2 - 5 θl μ1 Φ2 +
      ηt (8 × (1 + μ1) + 5 θl (6 + Φ1 + Φ2) + θl μ1 (78 + 5 Φ1 + 5 Φ2))) -
    x (-1 + η) × (4 × (-1 + η) θp (-1 - 7 μ1 + 4 η^2 (1 + μ1) - ηt (1 + μ1) -
        η (-7 + 17 μ1 + 4 ηt (1 + μ1))) + (-1 + ηt) θl
       (-60 × (1 + μ1) + θp (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2) +
          2 η (26 + 5 Φ1 + 5 Φ2 + μ1 (74 + 5 Φ1 + 5 Φ2))))) +
    θp (8 η^4 (1 + μ1) + 60 ηt (1 + μ1) - 4 η^3 (-3 + 9 μ1 + 2 ηt (1 + μ1)) +
      η^2 (-24 - θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)) +
        ηt (4 × (1 + μ1) + θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)))) +
      η (4 + 28 μ1 - θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2)) +
        ηt (-56 × (1 + μ1) + θl (122 + 45 Φ1 - 15 Φ2 +
            μ1 (146 + 45 Φ1 + 57 Φ2))))))) -
(1 + x + η - x η)^2 θl (24 (cv^2 + 34 u - 4 ϵ) (-1 + w (-1 + η))^3 (x + η - x η)^3
    (w + x + η - w η - x η)^3 (-1 + ηt) θp +
  f (-1 + η) × (2 w^5 (-1 + η)^5 (2 x^3 (-1 + η)^3
        ((-1 + η) θp (-118 + 10 η^2 + 5 Φ2 - ηt (7 + Φ2) + η (7 - 10 ηt + Φ2)) +
          (-1 + ηt) θl (-5 × (10 + Φ2) + 6 θp (28 + 5 Φ1 + 5 Φ2))) -
      2 η^2 θp (10 η^4 + 5 ηt (10 + Φ2) + η^3 (-3 - 10 ηt + Φ2) + η^2 (-125 -
            ηt (-3 + Φ2) + 4 Φ2) + η (118 - 5 Φ2 - 6 θl (28 + 5 Φ1 + 5 Φ2) +
            ηt (-43 - 4 Φ2 + 6 θl (28 + 5 Φ1 + 5 Φ2)))) - x^2 (-1 + η)^2
        (60 η^4 θp - 6 η^2 θp (125 + ηt (-3 + Φ2) - 4 Φ2) - 6 η^3 θp (3 + 10 ηt - Φ2) +
          ηt θp (107 + 10 Φ2) + η (-θp (-708 + 30 Φ2 + ηt (65 + 4 Φ2)) +
            (-1 + ηt) θl (-193 - 20 Φ2 + 36 θp (28 + 5 Φ1 + 5 Φ2)))) +
      x (-1 + η) η (60 η^4 θp - 6 η^2 θp (125 + ηt (-3 + Φ2) - 4 Φ2) -
          6 η^3 θp (3 + 10 ηt - Φ2) + ηt θp (213 + 20 Φ2) +
          η ((-1 + ηt) θl (-87 - 10 Φ2 + 36 θp (28 + 5 Φ1 + 5 Φ2)) -
            θp (-708 + 30 Φ2 + ηt (171 + 14 Φ2)))) +
```

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w^3 (-1 + η)^3 (4 x^5 (-1 + η)^5 (3 × (-1 + η) θp (-118 + 10 η^2 + 5 Φ2 -
          ηt (7 + Φ2) + η (7 - 10 ηt + Φ2)) + (-1 + ηt) θl
        (-5 × (6 + Φ2) + θp (384 + 24 Φ1 + 20 Φ2 - 5 Φ2^2))) +
    x^3 (-1 + η)^3 (4 × (-1 + η) θp (-78 + 300 η^4 - 266 ηt + 3 Φ2 - 31 ηt Φ2 +
          30 η^3 (19 - 10 ηt + Φ2) - 6 η^2 (543 - 31 Φ2 + 5 ηt (19 + Φ2)) -
          η (2858 - 98 Φ2 + ηt (69 + 44 Φ2))) + (-1 + ηt) θl
        (-60 × (10 + Φ2) + 4 θp (228 + 90 Φ1 + 96 Φ2 + 5 Φ2^2) +
          η (-18 × (177 + 20 Φ2) + θp (15 682 + 2799 Φ1 + 2907 Φ2)) + 2 η^2
           (-12 × (31 + 5 Φ2) + θp (7026 + 471 Φ1 + 335 Φ2 - 100 Φ2^2)))) -
    x^4 (-1 + η)^4 (2 × (-1 + η) θp (-1416 + 300 η^3 - 19 ηt + 48 Φ2 - 22 ηt Φ2 +
          30 η^2 (13 - 10 ηt + Φ2) - 6 η (569 - 28 Φ2 + 5 ηt (13 + Φ2))) +
       (-1 + ηt) θl (24 × (-46 - 5 Φ2 + θp (164 + 30 Φ1 + 31 Φ2)) +
          η (-20 × (25 + 4 Φ2) + θp (7366 + 477 Φ1 + 369 Φ2 - 100 Φ2^2)))) -
    η^2 θp (120 η^6 + 60 ηt (10 + Φ2) + 12 η^5 (27 - 10 ηt + Φ2) - 12 η^4
        (124 - 7 Φ2 + ηt (27 + Φ2)) + η^2 (2624 - 92 Φ2 - θl (3874 + 639 Φ1 +
             675 Φ2) + ηt (-812 - 80 Φ2 + θl (3874 + 639 Φ1 + 675 Φ2))) +
       η^3 (-1892 + 8 Φ2 - θl (1170 + 87 Φ1 + 43 Φ2 - 20 Φ2^2) +
          ηt (318 - 32 Φ2 + θl (1170 + 87 Φ1 + 43 Φ2 - 20 Φ2^2))) +
       2 η (-2 × (3 × (-26 + Φ2) + θl (228 + 90 Φ1 + 96 Φ2 + 5 Φ2^2)) +
          ηt (169 + 32 Φ2 + 2 θl (228 + 90 Φ1 + 96 Φ2 + 5 Φ2^2)))) -
    x^2 (-1 + η)^2 (1200 η^6 θp - 120 η^5 θp (-15 + 10 ηt - Φ2) +
       6 ηt θp (107 + 10 Φ2) - 24 η^4 θp (637 - 29 Φ2 + 5 ηt (15 + Φ2)) +
       3 η^2 (-2 θp (-2728 + 94 Φ2 + 3 ηt (145 + 6 Φ2)) + (-1 + ηt) θl
            (-24 × (41 + 5 Φ2) + θp (7810 + 1359 Φ1 + 1419 Φ2))) +
       4 η^3 (-3 θp (418 + 18 Φ2 + ηt (-203 + 12 Φ2)) + (-1 + ηt)
            θl (-117 - 20 Φ2 + θp (3330 + 231 Φ1 + 149 Φ2 - 50 Φ2^2))) +
       6 η (2 θp (78 - 3 Φ2 + ηt (211 + 26 Φ2)) + (-1 + ηt) θl
            (-193 - 20 Φ2 + 2 θp (228 + 90 Φ1 + 96 Φ2 + 5 Φ2^2)))) +
    x (-1 + η) η (600 η^6 θp - 60 η^5 θp (-21 + 10 ηt - Φ2) + 6 ηt
        θp (213 + 20 Φ2) - 12 η^4 θp (631 - 32 Φ2 + 5 ηt (21 + Φ2)) +
       η^2 (-4 θp (-2676 + 93 Φ2 + ηt (649 + 49 Φ2)) + 3 × (-1 + ηt)
            θl (-10 × (29 + 4 Φ2) + θp (5186 + 879 Φ1 + 923 Φ2))) +
       2 η^3 (-2 θp (1482 + 9 Φ2 + ηt (-352 + 29 Φ2)) + (-1 + ηt)
            θl (-2 × (26 + 5 Φ2) + θp (3134 + 225 Φ1 + 129 Φ2 - 50 Φ2^2))) +
       6 η (θp (156 + 295 ηt - 6 Φ2 + 42 ηt Φ2) + (-1 + ηt) θl
            (-87 - 10 Φ2 + 2 θp (228 + 90 Φ1 + 96 Φ2 + 5 Φ2^2))))) +
w^4 (-1 + η)^4 (2 x^4 (-1 + η)^4 (6 × (-1 + η) θp (-118 + 10 η^2 + 5 Φ2 -
          ηt (7 + Φ2) + η (7 - 10 ηt + Φ2)) + (-1 + ηt) θl
        (-4 × (46 + 5 Φ2) + θp (892 + 120 Φ1 + 112 Φ2 - 5 Φ2^2))) +
    η^2 θp (120 η^5 + 60 ηt (10 + Φ2) + 12 η^4 (7 - 10 ηt + Φ2) -
       12 η^3 (128 - 5 Φ2 + ηt (7 + Φ2)) + η^2 (388 - 40 Φ2 -
          6 ηt (17 + 6 Φ2) - θl (1638 + 213 Φ1 + 193 Φ2 - 10 Φ2^2) +
          ηt θl (1638 + 213 Φ1 + 193 Φ2 - 10 Φ2^2)) + 2 η
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(472 - 16 Φ2 - 3 ηt (49 + 2 Φ2) - θl (772 + 180 Φ1 + 192 Φ2 + 5 Φ2^2) +
    ηt θl (772 + 180 Φ1 + 192 Φ2 + 5 Φ2^2))) - x^3 (-1 + η)^3 ((-1 + ηt)
  θl (-60 × (10 + Φ2) - 6 η (177 + 20 Φ2) + η θp (6990 + 933 Φ1 +
        865 Φ2 - 40 Φ2^2) + 2 θp (772 + 180 Φ1 + 192 Φ2 + 5 Φ2^2)) +
  4 × (-1 + η) θp (-236 + 120 η^3 - 6 η^2 (-19 + 20 ηt - 2 Φ2) +
    8 Φ2 - 3 ηt (29 + 4 Φ2) - 3 η (465 - 21 Φ2 + ηt (38 + 4 Φ2)))) +
3 x^2 (-1 + η)^2 (240 η^5 θp + 24 η^4 θp (2 - 10 ηt + Φ2) + 2 ηt θp
    (107 + 10 Φ2) - 12 η^3 θp (253 - 9 Φ2 + 2 ηt (2 + Φ2)) +
  η^2 (-2 θp (-902 + 50 Φ2 + ηt (29 + 12 Φ2)) + (-1 + ηt) θl
      (-8 × (41 + 5 Φ2) + θp (3422 + 453 Φ1 + 417 Φ2 - 20 Φ2^2))) +
  2 η (2 θp (236 - 8 Φ2 + ηt (33 + 7 Φ2)) + (-1 + ηt) θl
      (-193 - 20 Φ2 + θp (772 + 180 Φ1 + 192 Φ2 + 5 Φ2^2)))) -
x (-1 + η) η (480 η^5 θp - 24 η^4 θp (-9 + 20 ηt - 2 Φ2) +
  6 ηt θp (213 + 20 Φ2) - 12 η^3 θp (509 - 19 Φ2 + 2 ηt (9 + 2 Φ2)) +
  η^2 (-12 θp (-215 + 25 ηt + 15 Φ2 + 8 ηt Φ2) + (-1 + ηt) θl
      (-10 × (29 + 4 Φ2) + θp (6698 + 879 Φ1 + 803 Φ2 - 40 Φ2^2))) +
  6 η (θp (472 - 16 Φ2 + ηt (-47 + 4 Φ2)) + (-1 + ηt) θl
      (-87 - 10 Φ2 + θp (772 + 180 Φ1 + 192 Φ2 + 5 Φ2^2)))))) +
(x + η - x η)^2 (2 x^4 (-1 + η)^4 θp (156 + 60 η^3 - 156 θl - 4 η^2
    (28 - 5 θl + 5 ηt (2 + θl) - Φ2) - 6 Φ2 - 12 θl Φ2 +
  5 θl Φ2^2 + ηt (-26 + 156 θl + 2 Φ2 + 12 θl Φ2 - 5 θl Φ2^2) -
  2 η (52 + 13 θl - Φ2 - 3 θl Φ2 + ηt (-33 - 13 θl + Φ2 + 3 θl Φ2))) +
2 x^3 (-1 + η)^3 (-8 × (-1 + η) η θp (-78 + 30 η^2 + 13 ηt + 3 Φ2 -
      ηt Φ2 + η (-26 - 20 ηt + 2 Φ2)) + (-1 + ηt) θl
    (10 × (6 + Φ2) + θp (80 η^3 - 48 Φ1 + 8 η^2 (-13 + 3 Φ2) -
        5 × (12 + 8 Φ2 + Φ2^2) + 4 η (-156 - 12 Φ2 + 5 Φ2^2)))) + η^2 θp
  (120 η^5 - 8 η^4 (28 - 5 θl + 5 ηt (2 + θl) - Φ2) + 2 ηt (59 + 10 Φ2) +
  η (-2 ηt (59 + 10 Φ2) - θl (118 + 87 Φ1 + 79 Φ2 + 10 Φ2^2) +
      ηt θl (118 + 87 Φ1 + 79 Φ2 + 10 Φ2^2)) - 4 η^3
    (52 + θl (13 - 3 Φ2) - Φ2 + ηt (-33 + Φ2 + θl (-13 + 3 Φ2))) -
  2 η^2 (6 × (-26 + Φ2) + θl (156 + 12 Φ2 - 5 Φ2^2) + ηt (26 - 2 Φ2 +
        θl (-156 - 12 Φ2 + 5 Φ2^2)))) + x^2 (-1 + η)^2 (720 η^5 θp -
  48 η^4 θp (28 - 5 θl + 5 ηt (2 + θl) - Φ2) + 10 ηt θp (11 + 2 Φ2) -
  24 η^3 θp (52 + θl (13 - 3 Φ2) - Φ2 + ηt (-33 + Φ2 + θl (-13 + 3 Φ2))) -
  12 η^2 θp (6 × (-26 + Φ2) + θl (156 + 12 Φ2 - 5 Φ2^2) +
      ηt (26 - 2 Φ2 + θl (-156 - 12 Φ2 + 5 Φ2^2))) +
  5 η (-2 ηt θp (11 + 2 Φ2) + (-1 + ηt) θl (-52 - 8 Φ2 +
        θp (74 + 57 Φ1 + 49 Φ2 + 6 Φ2^2)))) - 2 x (-1 + η) η (240 η^5 θp -
  16 η^4 θp (28 - 5 θl + 5 ηt (2 + θl) - Φ2) + 4 ηt θp (33 + 5 Φ2) -
  8 η^3 θp (52 + θl (13 - 3 Φ2) - Φ2 + ηt (-33 + Φ2 + θl (-13 + 3 Φ2))) -
  4 η^2 θp (6 × (-26 + Φ2) + θl (156 + 12 Φ2 - 5 Φ2^2) +
      ηt (26 - 2 Φ2 + θl (-156 - 12 Φ2 + 5 Φ2^2))) +
  η (-4 ηt θp (33 + 5 Φ2) + (-1 + ηt) θl (-2 × (26 + 5 Φ2) +
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                    θp (184 + 138 Φ1 + 122 Φ2 + 15 Φ2^2)))))) +
w^2 (-1 + η)^2 (2 x^6 (-1 + η)^6 θp (236 + 20 η^3 - 236 θl - 10 Φ2 +
        5 θl Φ2^2 + η^2 (-6 - 20 ηt + 2 Φ2) + η (-250 - 2 ηt (-3 + Φ2) + 8 Φ2) +
        ηt (14 + 236 θl + 2 Φ2 - 5 θl Φ2^2)) + 3 x^4 (-1 + η)^4
      (2 × (-1 + η) θp (100 η^4 - 4 η (603 + 5 ηt (-1 + Φ2) - 21 Φ2) +
            6 × (-26 + Φ2) + 10 η^3 (37 - 10 ηt + Φ2) -
            ηt (29 + 12 Φ2) - 10 η^2 (91 - 8 Φ2 + ηt (37 + Φ2))) -
        (-1 + ηt) θl (8 × (46 + 5 Φ2) + 10 η^2 θp (-178 + 6 Φ2 + 5 Φ2^2) -
            2 θp (340 + 120 Φ1 + 124 Φ2 + 5 Φ2^2) +
            η (500 + 80 Φ2 - θp (5382 + 477 Φ1 + 513 Φ2 - 50 Φ2^2)))) +
    η^2 θp (40 η^7 + 20 ηt (10 + Φ2) + 4 η^6 (87 - 10 ηt + Φ2) -
        4 η^5 (62 - 13 Φ2 + ηt (87 + Φ2)) + 3 η^3 (736 - 28 Φ2 - 2 ηt (5 + 8 Φ2) -
            θl (1114 + 87 Φ1 + 91 Φ2 - 10 Φ2^2) + ηt θl (1114 + 87 Φ1 +
                91 Φ2 - 10 Φ2^2)) - 2 η^4 (1642 + 10 ηt (-11 + Φ2) - 32 Φ2 +
            θl (14 - 18 Φ2 - 5 Φ2^2) + ηt θl (-14 + 18 Φ2 + 5 Φ2^2)) +
        3 η^2 (-12 × (-26 + Φ2) - 8 ηt (33 + 2 Φ2) - θl (642 + 213 Φ1 +
                229 Φ2 + 10 Φ2^2) + ηt θl (642 + 213 Φ1 + 229 Φ2 + 10 Φ2^2)) +
        10 η (-θl (20 + 12 Φ1 + 12 Φ2 + Φ2^2) + ηt (79 + 10 Φ2 +
                θl (20 + 12 Φ1 + 12 Φ2 + Φ2^2)))) + 6 x^5 (-1 + η)^5
      (-2 × (-1 + η) θp (-236 + 20 η^3 - 2 ηt (-3 + Φ2) + 8 Φ2 +
            η^2 (44 - 20 ηt + 2 Φ2) - η (215 - 13 Φ2 + 2 ηt (22 + Φ2))) +
        (-1 + ηt) θl (10 × (6 + Φ2) + θp (-532 - 48 Φ1 - 52 Φ2 +
                5 Φ2^2 + 2 η (-209 + 3 Φ2 + 5 Φ2^2)))) +
    x^2 (-1 + η)^2 (600 η^7 θp - 60 η^6 θp (-57 + 10 ηt - Φ2) + 2 ηt
            θp (107 + 10 Φ2) - 60 η^5 θp (107 - 10 Φ2 + ηt (57 + Φ2)) +
        12 η^3 (-θp (-2048 + 74 Φ2 + ηt (51 + 16 Φ2)) + (-1 + ηt) θl
                (-117 - 20 Φ2 + θp (2744 + 231 Φ1 + 245 Φ2 - 25 Φ2^2))) +
        η (4 ηt θp (779 + 85 Φ2) + 2 × (-1 + ηt) θl (-193 -
                20 Φ2 + 15 θp (20 + 12 Φ1 + 12 Φ2 + Φ2^2))) -
        6 η^4 θp (4632 - 74 Φ2 - 5 θl (-104 + 12 Φ2 + 5 Φ2^2) +
            5 ηt (-110 + 6 Φ2 + θl (-104 + 12 Φ2 + 5 Φ2^2))) +
        9 η^2 (2 θp (312 - 111 ηt - 12 Φ2 + 4 ηt Φ2) + (-1 + ηt) θl
                (-8 × (41 + 5 Φ2) + θp (1322 + 453 Φ1 + 477 Φ2 + 20 Φ2^2)))) -
    x (-1 + η) η (240 η^7 θp - 24 η^6 θp (-72 + 10 ηt - Φ2) + 2 ηt
            θp (213 + 20 Φ2) - 12 η^5 θp (175 - 23 Φ2 + 2 ηt (72 + Φ2)) +
        6 η^3 (-2 θp (36 × (-27 + Φ2) + ηt (23 + 14 Φ2)) + (-1 + ηt) θl
                (-2 × (26 + 5 Φ2) + θp (2766 + 225 Φ1 + 237 Φ2 - 25 Φ2^2))) +
        2 η (ηt θp (1389 + 160 Φ2) + (-1 + ηt) θl (-87 - 10 Φ2 +
                15 θp (20 + 12 Φ1 + 12 Φ2 + Φ2^2))) -
        12 η^4 θp (1273 - 23 Φ2 + θl (61 - 15 Φ2 - 5 Φ2^2) +
            ηt (-114 + 8 Φ2 + θl (-61 + 15 Φ2 + 5 Φ2^2))) +
        3 η^2 (-8 θp (6 × (-26 + Φ2) + ηt (97 + 3 Φ2)) + (-1 + ηt) θl
                (-10 × (29 + 4 Φ2) + θp (2606 + 879 Φ1 + 935 Φ2 + 40 Φ2^2)))) +
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```
x^3 (-1 + η)^3 (-4 × (-1 + η) θp (200 η^5 - 20 η^4 (-52 + 10 ηt - Φ2) -
      3 ηt (93 + 10 Φ2) - 9 η (104 + 23 ηt - 4 Φ2 + 8 ηt Φ2) -
      12 η^2 (-22 × (-28 + Φ2) + 5 ηt (1 + Φ2)) - 10 η^3
       (137 - 19 Φ2 + 2 ηt (52 + Φ2))) + (-1 + ηt) θl (20 × (10 + Φ2) -
      10 θp (20 + 12 Φ1 + 12 Φ2 + Φ2^2) + 40 η^3 θp (-143 + 9 Φ2 + 5 Φ2^2) +
      6 η^2 (372 + 60 Φ2 - θp (5438 + 471 Φ1 + 503 Φ2 - 50 Φ2^2)) - 3 η
       (-6 × (177 + 20 Φ2) + θp (2682 + 933 Φ1 + 973 Φ2 + 40 Φ2^2)))))) +
w (x (-1 + η) - η) (-1 + η) × (-4 x^5 (-1 + η)^5 θp (236 + 30 η^3 -
    236 θl - 8 Φ2 - 6 θl Φ2 + 5 θl Φ2^2 + η^2 (-9 - 30 ηt + 3 Φ2) +
    η (-257 - 2 ηt (-18 + Φ2) + 5 Φ2 + 3 θl (9 + Φ2) - 3 ηt θl (9 + Φ2)) +
    ηt (2 × (-3 + Φ2) + θl (236 + 6 Φ2 - 5 Φ2^2))) - x^3 (-1 + η)^3
   (-((-1 + ηt) θl (120 η^3 θp (13 + Φ2) + 60 η (19 + 3 Φ2) +
          8 × (46 + 5 Φ2) - 3 η θp (1738 + 381 Φ1 + 421 Φ2) - 4 θp (92 + 60
             Φ1 + 56 Φ2 + 5 Φ2^2) + 8 η^2 θp (-1258 - 12 Φ2 + 25 Φ2^2))) +
    2 × (-1 + η) θp (600 η^4 - 24 η (78 + ηt (-13 + Φ2) - 3 Φ2) -
       60 η^3 (-19 + 10 ηt - Φ2) - 15 ηt (11 + 2 Φ2) -
       8 η^2 (668 - 26 Φ2 + 5 ηt (9 + Φ2)))) +
   η^2 θp (120 η^6 + 12 η^5 (27 - 10 ηt + Φ2) + 10 ηt (33 + 4 Φ2) - 4 η^4
        (425 - 11 Φ2 + 2 ηt (12 + Φ2) - 3 θl (19 + Φ2) + 3 ηt θl (19 + Φ2)) +
    3 η^2 (-12 × (-26 + Φ2) - 2 ηt (85 + 8 Φ2) -
       θl (430 + 87 Φ1 + 103 Φ2) + ηt θl (430 + 87 Φ1 + 103 Φ2)) +
    η (-213 θl Φ1 + 4 ηt (6 + 5 Φ2) - 5 θl (66 + 41 Φ2 + 4 Φ2^2) +
       ηt θl (213 Φ1 + 5 × (66 + 41 Φ2 + 4 Φ2^2))) -
    4 η^3 (5 × (-16 + Φ2) + θl (275 - 3 Φ2 - 5 Φ2^2) +
       ηt (-93 + Φ2 + θl (-275 + 3 Φ2 + 5 Φ2^2)))) + 4 x^4 (-1 + η)^4
   ((-1 + η) θp (150 η^3 + 9 × (-26 + Φ2) - 3 ηt (-13 + Φ2) +
       15 η^2 (13 - 10 ηt + Φ2) - 2 η (629 - 23 Φ2 + 5 ηt (3 + Φ2))) -
    (-1 + ηt) θl (15 × (6 + Φ2) + θp (15 η^2 (11 + Φ2) - 6 × (54 + 12 Φ1 +
             13 Φ2) + η (-1219 - 21 Φ2 + 25 Φ2^2)))) - x (-1 + η) η
   (600 η^6 θp - 60 η^5 θp (-21 + 10 ηt - Φ2) + 2 ηt θp (369 + 40 Φ2) -
    4 η^3 θp (-556 + 2 ηt (-183 + Φ2) + 28 Φ2 + θl (1336 - 6 Φ2 - 25 Φ2^2) +
       ηt θl (-1336 + 6 Φ2 + 25 Φ2^2)) - 4 η^4 θp (1957 - 49 Φ2 -
       15 θl (17 + Φ2) + 5 ηt (2 × (6 + Φ2) + 3 θl (17 + Φ2))) +
    3 η^2 (-2 θp (24 × (-26 + Φ2) + ηt (295 + 22 Φ2)) +
       (-1 + ηt) θl (-4 × (26 + 5 Φ2) + θp (1734 + 363 Φ1 + 419 Φ2))) +
    2 η (2 ηt θp (102 + 25 Φ2) + (-1 + ηt) θl (-5 × (29 + 4 Φ2) +
          θp (514 + 333 Φ1 + 317 Φ2 + 30 Φ2^2)))) + x^2 (-1 + η)^2
   (1200 η^6 θp - 120 η^5 θp (-15 + 10 ηt - Φ2) + 4 ηt θp (93 + 10 Φ2) -
    8 η^4 θp (1789 + (-43 + 10 ηt) Φ2 + 15 × (-1 + ηt) θl (15 + Φ2)) +
    3 η^2 (-2 θp (36 × (-26 + Φ2) + ηt (343 + 18 Φ2)) +
       (-1 + ηt) θl (-4 × (91 + 15 Φ2) + 3 θp (870 + 187 Φ1 + 211 Φ2))) -
    8 η^3 θp (-712 + 31 Φ2 + θl (1297 + 3 Φ2 - 25 Φ2^2) +
       ηt (-267 - Φ2 + θl (-1297 - 3 Φ2 + 25 Φ2^2))) +
    η (10 ηt θp (75 + 14 Φ2) + (-1 + ηt) θl (-694 - 80 Φ2 +
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                    θp (1066 + 693 Φ1 + 653 Φ2 + 60 Φ2^2)))))))) +
2 cσ^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η) (-1 + η)^2
 (2 x^6 (-1 + η)^6 θp
    (2 - 2 θl - 9 μ1 - 15 w μ1 - 4 w^2 μ1 + 5 θl μ1 + 7 w θl μ1 -
      5 μ1^2 - 9 w μ1^2 - 4 w^2 μ1^2 + θl μ1^2 + w θl μ1^2 +
      w^2 η^4 (1 + μ1) - w η^3 (3 + w (3 + ηt - 4 μ1)) × (1 + μ1) +
      η^2 (2 × (1 + μ1) + 3 w^2 (1 + ηt - 4 μ1) × (1 + μ1) +
          3 w (2 + ηt - 3 μ1 + ηt μ1 - 3 μ1^2)) + ηt (2 × (1 + μ1) + w^2 (1 + μ1) -
          θl (-2 + 5 μ1 + μ1^2) + w (3 + (3 - 7 θl) μ1 - θl μ1^2)) -
      η (4 + 2 ηt - 7 μ1 + 2 ηt μ1 - 5 μ1^2 + w^2 (1 + 3 ηt - 12 μ1) × (1 + μ1) +
          w (3 + (-27 + 7 θl) μ1 + (-18 + θl) μ1^2 +
              ηt (6 + (6 - 7 θl) μ1 - θl μ1^2)))) +
   θp (w^4 (-1 + η)^5 (2 η^5 (1 + μ1) + 2 η ηt (μ1^2 + 5 μ1 (-2 + μ2) + 5 × (-1 + μ2)) -
          2 η^4 (-2 - 4 μ1^2 + ηt (1 + μ1) + 6 μ1 (-1 + μ2)) + 5 ηt (1 + μ1) μ2 +
          2 η^3 (6 + 7 μ1^2 - 13 μ1 (-1 + μ2) + 11 μ2 + ηt (-2 + μ1 (-2 + 6 μ2))) +
          η^2 (2 × (5 + 3 μ1^2 + 11 μ2 + μ1 (8 + 5 μ2)) +
              ηt (-12 + 26 μ1^2 + 5 μ2 + μ1 (-22 + 17 μ2)))) - w^3 (-1 + η)^3
        (4 η^7 (1 + μ1) + 2 η^6 (5 + 8 μ1^2 - 2 ηt (1 + μ1) + μ1 (13 - 12 μ2)) -
          2 η ηt (4 μ1^2 + 5 × (-4 + μ2) + 17 μ1 (-2 + μ2)) - 15 ηt (1 + μ1) μ2 +
          2 η^5 (11 + 15 μ1^2 - 32 μ1 (-1 + μ2) + 22 μ2 + ηt (-5 + μ1 (-5 + 12 μ2))) -
          η^2 (10 μ1^2 + ηt (-26 + 60 μ1^2 + 5 θl Φ1 + μ2 (-24 + 5 θl (Φ1 - Φ2)) +
                  μ1 (-62 + μ2 (48 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - 5 θl Φ2) +
              μ1 (62 - 11 θl (Φ1 - Φ2) + μ2 (12 - 5 θl Φ1 + 5 θl Φ2)) +
              5 × (8 + θl (-Φ1 + Φ2) + μ2 (12 + θl (-Φ1 + Φ2)))) +
          2 η^3 (-13 - 15 μ1^2 - 26 μ2 + 5 θl Φ1 + 5 θl μ2 Φ1 + μ1 (-34 +
                  μ2 (52 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - 5 θl Φ2 - 5 θl μ2 Φ2 +
              ηt (24 μ1^2 - 11 μ1 (3 + θl (Φ1 - Φ2)) + μ1 μ2 (5 - 5 θl Φ1 + 5 θl Φ2) +
                  5 × (-3 + μ2 + θl (-Φ1 + Φ2) + θl μ2 (-Φ1 + Φ2)))) +
          η^4 (30 - 6 μ1^2 + 68 μ2 + 5 θl Φ1 + 5 θl μ2 Φ1 + μ1 (36 + μ2
                  (-4 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - 5 θl Φ2 - 5 θl μ2 Φ2 +
              ηt (-22 + 20 μ1^2 - 5 θl Φ1 + 5 θl Φ2 + μ2 (-9 - 5 θl Φ1 + 5 θl Φ2) +
                  μ1 (-50 - 11 θl Φ1 + 11 θl Φ2 + μ2 (63 - 5 θl Φ1 + 5 θl Φ2)))) +
      η (4 η^7 (1 + μ1) + ηt (-2 μ1^2 + μ1 (8 - 19 μ2) + 5 × (2 + μ2)) -
          2 η^6 (2 ηt (1 + μ1) + μ1 (-11 - 5 μ1 + 12 μ2)) +
          η^5 (2 + 22 μ1 + 8 μ1^2 + 22 μ2 - 14 μ1 μ2 + 4 ηt (-1 + μ1^2 + 3 μ1 μ2) +
              θl (2 × (-2 + μ2) + μ1^2 (4 + Φ1 + Φ2) + μ1 (12 - 10 μ2 + Φ1 + Φ2)) -
              ηt θl (2 × (-2 + μ2) + μ1^2 (4 + Φ1 + Φ2) + μ1 (12 - 10 μ2 + Φ1 + Φ2))) -
          η^3 (6 + 26 μ1 + 8 μ1^2 + 30 μ2 - 30 μ1 μ2 - θl (6 + 5 × (1 + μ2) Φ1 +
                  μ1 (-4 + 21 Φ1 + μ2 (36 + 5 Φ1 - 17 Φ2) - 15 Φ2) - 5 Φ2 - 5 μ2 Φ2 +
                  2 μ1^2 (1 + 2 Φ1 + Φ2)) + ηt (16 + 32 μ1 - 8 μ1^2 + 5 μ2 - 7 μ1 μ2 +
                  θl (6 + 5 × (1 + μ2) Φ1 + μ1 (-4 + 21 Φ1 + μ2 (36 + 5 Φ1 - 17 Φ2) -
                          15 Φ2) - 5 Φ2 - 5 μ2 Φ2 + 2 μ1^2 (1 + 2 Φ1 + Φ2)))) -
          2 η^4 (-10 + 3 μ1 + 7 μ1^2 - 8 μ2 - 20 μ1 μ2 - θl (1 + 4 μ2 + μ1^2
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$$
\begin{aligned}
&(3 + 2\,\Phi1 + \Phi2) + \mu1\,(10 - 2\,\mu2 + 5\,\Phi1 - 2\,\Phi2 - 6\,\mu2\,\Phi2)\big) + \\
&\quad \eta t\,\big(-2 \times \big(1 + \mu1^2 - \mu2 + \mu1\,(-4 + 5\,\mu2)\big) + \theta l\,\big(1 + 4\,\mu2 + \\
&\qquad \mu1^2\,(3 + 2\,\Phi1 + \Phi2) + \mu1\,(10 - 2\,\mu2 + 5\,\Phi1 - 2\,\Phi2 - 6\,\mu2\,\Phi2)\big)\big)\big) + \\
&\eta\,\big(\theta l\,\big(5 \times (1 + \mu2) \times (-2 + \Phi1 - \Phi2) + \mu1^2\,(2 - \Phi1 + \Phi2) + \\
&\qquad \mu1\,(5\,\mu2\,\Phi1 + 4 \times (-2 + \Phi1 - \Phi2) + 7\,\mu2\,(2 + \Phi2))\big) + \\
&\quad \eta t\,\big(20 + 24\,\mu1 + 4\,\mu1^2 + 5\,\mu2 - 19\,\mu1\,\mu2 + \theta l \\
&\qquad \big(\mu1^2\,(-2 + \Phi1 - \Phi2) - 5 \times (1 + \mu2) \times (-2 + \Phi1 - \Phi2) - \\
&\qquad \mu1\,(5\,\mu2\,\Phi1 + 4 \times (-2 + \Phi1 - \Phi2) + 7\,\mu2\,(2 + \Phi2))\big)\big)\big) - \\
&\eta^2\,\big(-2 \times \big(2 \times \big(-5 + \mu1^2 - 2\,\mu2 - 4\,\mu1\,(1 + 2\,\mu2)\big) + \theta l\,\big(-5 - \\
&\qquad 8\,\mu2 + 5\,\Phi1 + 5\,\mu2\,\Phi1 - 5\,\Phi2 - 5\,\mu2\,\Phi2 + \mu1^2\,(1 + \Phi2) + \\
&\qquad \mu1\,(-10 + 8\,\Phi1 - 7\,\Phi2 + \mu2\,(22 + 5\,\Phi1 + \Phi2))\big)\big) + \\
&\quad \eta t\,\big(10 + 18\,\mu1^2 + \mu1\,(-20 + \mu2) + \mu2 + 2\,\theta l\,\big(-5 - 8\,\mu2 + \\
&\qquad 5\,\Phi1 + 5\,\mu2\,\Phi1 - 5\,\Phi2 - 5\,\mu2\,\Phi2 + \mu1^2\,(1 + \Phi2) + \\
&\qquad \mu1\,(-10 + 8\,\Phi1 - 7\,\Phi2 + \mu2\,(22 + 5\,\Phi1 + \Phi2))\big)\big)\big)\big) - w\,(-1 + \eta) \times \\
&\big(6\,\eta^8\,(1 + \mu1) + 2\,\eta^7\,\big(7 + 9\,\mu1^2 - 3\,\eta t\,(1 + \mu1) + \mu1\,(22 - 18\,\mu2)\big) - \\
&\quad 5\,\eta t\,(1 + \mu1)\,\mu2 + 2\,\eta\,\eta t\,\big(-4\,\mu1^2 + \mu1\,(22 - 31\,\mu2) + 5 \times (4 + \mu2)\big) + \\
&\quad \eta^6\,\big(2 \times (7 + (22 + \theta l)\,\mu2) + \mu1^2\,(34 + \theta l\,(4 + \Phi1 + \Phi2)) + \\
&\qquad \mu1\,(84 - 76\,\mu2 + \theta l\,(16 - 10\,\mu2 + \Phi1 + \Phi2)) - \\
&\qquad \eta t\,\big(2 \times (7 + \theta l\,\mu2) + \mu1^2\,(-4 + \theta l\,(4 + \Phi1 + \Phi2)) + \\
&\qquad \mu1\,(10 - 24\,\mu2 + \theta l\,(16 - 10\,\mu2 + \Phi1 + \Phi2))\big)\big) - \\
&\quad \eta^3\,\big(52 + 84\,\mu1 + 8\,\mu1^2 + 72\,\mu2 + 24\,\mu1\,\mu2 - \theta l\,\big(-28 + 30\,\Phi1 + \\
&\qquad \mu1\,(-46 + 55\,\Phi1 + \mu2\,(98 + 30\,\Phi1 - 6\,\Phi2) - 49\,\Phi2) + \\
&\qquad \mu2\,(-34 + 30\,\Phi1 - 30\,\Phi2) - 30\,\Phi2 + \mu1^2\,(6 + \Phi1 + 5\,\Phi2)\big) + \\
&\qquad \eta t\,\big(2 \times \big(16 + 22\,\mu1^2 + \mu1\,(-4 + \mu2) + \mu2\big) + \theta l\,\big(-28 + 30\,\Phi1 + \\
&\qquad \mu1\,(-46 + 55\,\Phi1 + \mu2\,(98 + 30\,\Phi1 - 6\,\Phi2) - 49\,\Phi2) + \\
&\qquad \mu2\,(-34 + 30\,\Phi1 - 30\,\Phi2) - 30\,\Phi2 + \mu1^2\,(6 + \Phi1 + 5\,\Phi2)\big)\big)\big) - \\
&\quad \eta^4\,\big(74\,\mu1 + 38\,\mu1^2 + 40\,\mu2 - 128\,\mu1\,\mu2 - \theta l\,\big(4 + 15\,\Phi1 + \mu1 \\
&\qquad (14 + 54\,\Phi1 + 3\,\mu2\,(14 + 5\,\Phi1 - 13\,\Phi2) - 40\,\Phi2) + \\
&\qquad 3\,\mu2\,(2 + 5\,\Phi1 - 5\,\Phi2) - 15\,\Phi2 + \mu1^2\,(9\,\Phi1 + 5 \times (2 + \Phi2))\big) + \\
&\qquad \eta t\,\big(46 + 102\,\mu1 - 40\,\mu1^2 + 19\,\mu2 - 53\,\mu1\,\mu2 + \theta l \\
&\qquad \big(4 + 15\,\Phi1 + \mu1\,(14 + 54\,\Phi1 + 3\,\mu2\,(14 + 5\,\Phi1 - 13\,\Phi2) - 40\,\Phi2) + \\
&\qquad 3\,\mu2\,(2 + 5\,\Phi1 - 5\,\Phi2) - 15\,\Phi2 + \mu1^2\,(9\,\Phi1 + 5 \times (2 + \Phi2))\big)\big)\big) + \\
&\quad \eta^2\,\big(4 \times (1 + \mu1) \times (-5 + \mu1 - 3\,\mu2) + \theta l\,\big(3\,\mu2\,(-8 + 5\,\Phi1 - 5\,\Phi2) + \\
&\qquad 5 \times (-4 + 3\,\Phi1 - 3\,\Phi2) + \mu1^2\,(2 - 2\,\Phi1 + 2\,\Phi2) + \\
&\qquad \mu1\,(-30 + 19\,\Phi1 - 19\,\Phi2 + 3\,\mu2\,(16 + 5\,\Phi1 + 3\,\Phi2))\big) + \\
&\qquad \eta t\,\big(-4 \times \big(-15 - 26\,\mu1 + \mu1^2 - 6\,\mu2 + 18\,\mu1\,\mu2\big) + \theta l\,\big(-3\,\mu2\,(-8 + \\
&\qquad 5\,\Phi1 - 5\,\Phi2) + 2\,\mu1^2\,(-1 + \Phi1 - \Phi2) + 5 \times (4 - 3\,\Phi1 + 3\,\Phi2) - \\
&\qquad \mu1\,(-30 + 19\,\Phi1 - 19\,\Phi2 + 3\,\mu2\,(16 + 5\,\Phi1 + 3\,\Phi2))\big)\big)\big) + \\
&\quad \eta^5\,\big(38 + 40\,\mu1 - 10\,\mu1^2 + 80\,\mu2 + 20\,\mu1\,\mu2 + \theta l\,\big(6 \times (2 + 3\,\mu2) + \\
&\qquad \mu1^2\,(10 + 7\,\Phi1 + 3\,\Phi2) + \mu1\,(46 + 19\,\Phi1 - 9\,\Phi2 - 6\,\mu2\,(3 + 4\,\Phi2))\big) - \\
&\qquad \eta t\,\big(2 + 38\,\mu1 - 12\,\mu1^2 + 8\,\mu2 - 64\,\mu1\,\mu2 + \theta l \\
&\qquad \big(6 \times (2 + 3\,\mu2) + \mu1^2\,(10 + 7\,\Phi1 + 3\,\Phi2) + \\
&\qquad \mu1\,(46 + 19\,\Phi1 - 9\,\Phi2 - 6\,\mu2\,(3 + 4\,\Phi2))\big)\big)\big)\big) +
\end{aligned}
$$

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w^2 (-1 + η)^2 (2 η^8 (1 + μ1) - 15 ηt (1 + μ1) μ2 - 2 η^7 (-7 + ηt -
      11 μ1 + ηt μ1 - 4 μ1^2 + 6 μ1 μ2) - 12 η ηt (-5 + μ1^2 + μ1 (-7 + 6 μ2)) +
    2 η^6 (12 + 21 μ1^2 + μ1 (45 - 43 μ2) + 11 μ2 + ηt (-7 + μ1 (-7 + 6 μ2))) -
    η^3 (2 × (30 + 17 μ1^2 + μ1 (65 - 38 μ2) + 58 μ2) -
      θl (μ1 (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
        6 × (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + μ1^2 (4 + Φ1 + 3 Φ2)) +
      ηt (44 + 4 μ1^2 - 4 μ1 (-15 + μ2) - 4 μ2 + θl μ1
          (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
        6 θl (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + θl μ1^2 (4 + Φ1 + 3 Φ2))) +
    η^2 (-2 × (23 + 25 μ2 + μ1 (29 + 7 μ2)) - θl (-((1 + μ2) ×
            (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
        26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)) +
      ηt (64 + 140 μ1 - 44 μ1^2 + 38 μ2 - 94 μ1 μ2 + θl
          (-((1 + μ2) × (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
            26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)))) +
    η^4 (20 - 34 μ1 - 42 μ1^2 + 36 μ2 + 108 μ1 μ2 + θl (μ1 (26 +
            44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
        3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2)) -
      ηt (50 + 118 μ1 - 52 μ1^2 + 23 μ2 - 97 μ1 μ2 + θl
          (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
            3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2)))) +
    η^5 (46 + 26 μ1^2 + 108 μ2 + 10 θl (1 + μ2) - 36 μ1 (-3 + 2 μ2) +
      θl μ1^2 (4 + 3 Φ1 + Φ2) + θl μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)) -
      ηt (14 + 30 μ1 - 8 μ1^2 + 4 μ2 - 68 μ1 μ2 + θl (10 × (1 + μ2) + μ1^2 (4 +
              3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))))) -
x^3 (-1 + η)^3 ((-1 + η) θp (20 + 104 η + 36 η^2 + 80 η^4 - 20 ηt - 16 η ηt -
    80 η^2 ηt - 80 η^3 ηt + 16 μ1 + 168 η μ1 + 456 η^2 μ1 + 440 η^3 μ1 +
    80 η^4 μ1 - 48 ηt μ1 - 80 η ηt μ1 - 64 η^2 ηt μ1 - 80 η^3 ηt μ1 -
    4 μ1^2 + 16 η μ1^2 + 180 η^2 μ1^2 + 200 η^3 μ1^2 + 44 ηt μ1^2 +
    32 η ηt μ1^2 + 16 η^2 ηt μ1^2 + 12 μ2 + 152 η μ2 + 196 η^2 μ2 -
    9 ηt μ2 - 16 η ηt μ2 + 12 μ1 μ2 + 8 η μ1 μ2 - 116 η^2 μ1 μ2 -
    240 η^3 μ1 μ2 + 39 ηt μ1 μ2 + 128 η ηt μ1 μ2 + 120 η^2 ηt μ1 μ2 +
    2 w^4 (-1 + η)^4 (5 + 12 μ1 + 7 μ1^2 + 4 η^2 (1 + μ1) + 11 μ2 -
      7 μ1 μ2 + 2 η (1 + 9 μ1 + 8 μ1^2 - 2 ηt (1 + μ1) - 3 μ1 μ2) +
      ηt (-2 - 2 μ1 + 6 μ1 μ2)) - w^3 (-1 + η)^3
     (60 + 40 μ1^2 + 44 ηt μ1^2 + 40 η^3 (1 + μ1) + 4 μ1 (31 - 14 μ2) +
      112 μ2 - 9 ηt (4 + μ2) + ηt μ1 (-64 + 87 μ2) +
      8 η^2 (7 + 27 μ1 + 20 μ1^2 - 5 ηt (1 + μ1) - 12 μ1 μ2) + 4 η (24 + 82 μ1 +
          46 μ1^2 + 44 μ2 - 43 μ1 μ2 + 2 ηt (-7 - 7 μ1 + 12 μ1 μ2))) +
    w^2 (-1 + η)^2 (40 η^4 (1 + μ1) + 2 × (51 + 92 μ1 + 17 μ1^2 + 83 μ2 -
            19 μ1 μ2) - 40 η^3 (-4 + ηt - 8 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
      ηt (-80 - 164 μ1 + 132 μ1^2 - 27 μ2 + 177 μ1 μ2) +
      4 η^2 (55 + 240 μ1 + 125 μ1^2 + 55 μ2 - 119 μ1 μ2 +
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            10 ηt (-4 - 4 μ1 + 3 μ1 μ2)) + 4 η (71 + 207 μ1 + 76 μ1^2 +
            130 μ2 - 98 μ1 μ2 + ηt (-30 - 46 μ1 + 8 μ1^2 - 4 μ2 + 80 μ1 μ2))) -
    w (-1 + η) × (120 η^4 (1 + μ1) + 40 η^3 (5 + 9 μ1^2 - 3 ηt (1 + μ1) +
            μ1 (20 - 9 μ2)) + 4 × (18 + μ1^2 + 22 μ2 + μ1 (25 + 4 μ2)) +
        ηt (-68 + 132 μ1^2 - 27 μ2 + μ1 (-152 + 141 μ2)) +
        8 η^2 (26 + 65 μ1^2 + μ1 (151 - 62 μ2) + 52 μ2 + ηt (-25 + 2 μ1^2 +
                μ1 (-23 + 30 μ2))) + 8 η (33 + 21 μ1^2 - 28 μ1 (-3 + μ2) +
            62 μ2 + ηt (-11 + 8 μ1^2 - 4 μ2 + μ1 (-27 + 44 μ2))))) +
(-1 + ηt) θl (-30 - 60 η + 10 θp - 24 η θp - 20 η^2 θp + 80 η^3 θp -
    32 μ1 - 160 η μ1 - 120 η^2 μ1 + 24 η^3 μ1 + 18 θp μ1 + 10 η θp μ1 -
    188 η^2 θp μ1 - 220 η^3 θp μ1 + 10 μ1^2 + 56 η μ1^2 + 24 η^2 μ1^2 +
    24 η^3 μ1^2 - 4 θp μ1^2 - 14 η θp μ1^2 - 48 η^2 θp μ1^2 - 60 η^3 θp μ1^2 +
    w^4 (-1 + η)^4 (26 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2)) -
    10 μ2 - 15 η μ2 + 14 θp μ2 - 6 η θp μ2 - 68 η^2 θp μ2 -
    20 η^3 θp μ2 + 38 μ1 μ2 + 57 η μ1 μ2 - 34 θp μ1 μ2 -
    114 η θp μ1 μ2 - 20 η^2 θp μ1 μ2 + 100 η^3 θp μ1 μ2 -
    10 θp Φ1 - 20 η θp Φ1 - 17 θp μ1 Φ1 - 87 η θp μ1 Φ1 -
    94 η^2 θp μ1 Φ1 - 10 η^3 θp μ1 Φ1 - θp μ1^2 Φ1 - 19 η θp μ1^2 Φ1 -
    34 η^2 θp μ1^2 Φ1 - 10 η^3 θp μ1^2 Φ1 - 10 θp μ2 Φ1 - 20 η θp μ2 Φ1 -
    10 θp μ1 μ2 Φ1 - 20 η θp μ1 μ2 Φ1 - w^3 (-1 + η)^3 (76 μ1^2 +
        η (60 μ1^2 + μ1 (-156 + μ2 (57 - 20 θp (Φ1 - Φ2)) - 44 θp (Φ1 - Φ2)) -
            5 × (12 + 3 μ2 + 4 θp (Φ1 - Φ2) + 4 θp μ2 (Φ1 - Φ2))) +
        μ1 (-128 + μ2 (53 - 10 θp (Φ1 - Φ2)) - 22 θp (Φ1 - Φ2)) -
        5 × (12 - μ2 + 2 θp (Φ1 - Φ2) + 2 θp μ2 (Φ1 - Φ2))) + 10 θp Φ2 +
    20 η θp Φ2 + 13 θp μ1 Φ2 + 57 η θp μ1 Φ2 + 46 η^2 θp μ1 Φ2 -
    10 η^3 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 11 η θp μ1^2 Φ2 - 14 η^2 θp μ1^2 Φ2 -
    10 η^3 θp μ1^2 Φ2 + 10 θp μ2 Φ2 + 20 η θp μ2 Φ2 -
    2 θp μ1 μ2 Φ2 + 68 η θp μ1 μ2 Φ2 + 120 η^2 θp μ1 μ2 Φ2 +
    w (-1 + η) × (100 + 152 μ1 - 44 μ1^2 + 25 μ2 - 119 μ1 μ2 +
        2 θp (-14 + 15 Φ1 + μ1 (-22 + 28 Φ1 + μ2 (44 + 15 Φ1 - 3 Φ2) - 24 Φ2) +
            μ2 (-16 + 15 Φ1 - 15 Φ2) - 15 Φ2 + μ1^2 (4 + Φ1 + 3 Φ2)) +
        2 η^3 (10 θp μ2 + μ1^2 (-12 + 5 θp (6 + Φ1 + Φ2)) +
            μ1 (-12 + 5 θp (30 - 10 μ2 + Φ1 + Φ2))) +
        η (180 + 472 μ1 - 176 μ1^2 + 45 μ2 - 171 μ1 μ2 + θp (16 + 60 Φ1 +
                μ1 (62 + 219 Φ1 + 6 μ2 (23 + 10 Φ1 - 26 Φ2) - 157 Φ2) + 30 μ2
                (1 + 2 Φ1 - 2 Φ2) - 60 Φ2 + μ1^2 (39 Φ1 + 23 × (2 + Φ2)))) +
        8 η^2 (-6 × (-5 + μ1) μ1 + θp (3 × (5 + 7 μ2) + μ1^2 (11 + 8 Φ1 +
                3 Φ2) + μ1 (56 + 23 Φ1 - 12 Φ2 - 15 μ2 (1 + 2 Φ2))))) -
    w^2 (-1 + η)^2 (-84 μ1^2 + 3 μ1 (76 - 43 μ2) + 15 × (8 + μ2) +
        θp μ1 (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
        6 θp (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + θp μ1^2 (4 + Φ1 + 3 Φ2) +
        η (-9 × (20 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
            4 θp (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
                3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2)) +
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            2 η^2 (-12 × (-5 + μ1) μ1 + 5 θp (10 × (1 + μ2) + μ1^2 (4 +
                    3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))))) +
x^4 (-1 + η)^4 (2 × (-1 + η) θp (13 + 7 η - 10 η^2 + 30 η^3 - 2 ηt - 20 η ηt -
      30 η^2 ηt + 21 μ1 + 112 η μ1 + 155 η^2 μ1 + 30 η^3 μ1 - 10 ηt μ1 -
      18 η ηt μ1 - 30 η^2 ηt μ1 + 2 μ1^2 + 45 η μ1^2 + 75 η^2 μ1^2 +
      4 ηt μ1^2 + 2 η ηt μ1^2 + w^4 (-1 + η)^4 (1 + μ1) (η - ηt + 4 μ1) +
      19 μ2 + 47 η μ2 - 2 ηt μ2 + μ1 μ2 - 7 η μ1 μ2 -
      60 η^2 μ1 μ2 + 16 ηt μ1 μ2 + 30 η ηt μ1 μ2 -
      w^3 (-1 + η)^3 (10 + 39 μ1 + 23 μ1^2 + 10 η^2 (1 + μ1) + 22 μ2 -
          14 μ1 μ2 + η (7 + 47 μ1 + 40 μ1^2 - 10 ηt (1 + μ1) - 12 μ1 μ2) +
          ηt (-7 - 7 μ1 + 12 μ1 μ2)) + w^2 (-1 + η)^2
        (33 + 101 μ1 + 38 μ1^2 + 15 η^3 (1 + μ1) + 65 μ2 - 37 μ1 μ2 +
          ηt (-15 - 23 μ1 + 4 μ1^2 - 2 μ2 + 40 μ1 μ2) - 5 η^2
            (3 ηt (1 + μ1) - 2 × (4 + 10 μ1 + 6 μ1^2 - 3 μ1 μ2)) + η (40 + 225 μ1 +
              125 μ1^2 + 55 μ2 - 77 μ1 μ2 + 10 ηt (-4 - 4 μ1 + 3 μ1 μ2))) -
      w (-1 + η) × (32 + 83 μ1 + 21 μ1^2 + 45 η^3 (1 + μ1) + 62 μ2 -
          22 μ1 μ2 + 5 η^2 (10 + 55 μ1 + 27 μ1^2 - 9 ηt (1 + μ1) - 18 μ1 μ2) +
          ηt (-11 - 27 μ1 + 8 μ1^2 - 4 μ2 + 44 μ1 μ2) + η (41 + 291 μ1 + 130 μ1^2 +
              102 μ2 - 72 μ1 μ2 + 2 ηt (-25 + μ1^2 + 6 μ1 (-4 + 5 μ2))))) +
    (-1 + ηt) θl (-20 - 6 θp - 10 η θp + 60 η^2 θp - 52 μ1 - 80 η μ1 +
      16 η^2 μ1 + 2 θp μ1 - 92 η θp μ1 - 160 η^2 θp μ1 +
      28 μ1^2 + 16 η μ1^2 + 16 η^2 μ1^2 - 4 θp μ1^2 - 22 η θp μ1^2 -
      40 η^2 θp μ1^2 - 5 μ2 - 2 θp μ2 - 32 η θp μ2 - 10 η^2 θp μ2 +
      19 μ1 μ2 - 26 θp μ1 μ2 - 20 η θp μ1 μ2 + 50 η^2 θp μ1 μ2 -
      5 θp Φ1 - 22 θp μ1 Φ1 - 46 η θp μ1 Φ1 - 5 η^2 θp μ1 Φ1 -
      5 θp μ1^2 Φ1 - 16 η θp μ1^2 Φ1 - 5 η^2 θp μ1^2 Φ1 - 5 θp μ2 Φ1 -
      5 θp μ1 μ2 Φ1 + 5 θp Φ2 + 14 θp μ1 Φ2 + 24 η θp μ1 Φ2 -
      5 η^2 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 6 η θp μ1^2 Φ2 - 5 η^2 θp μ1^2 Φ2 +
      5 θp μ2 Φ2 + 17 θp μ1 μ2 Φ2 + 60 η θp μ1 μ2 Φ2 -
      w^3 (-1 + η)^3 (28 μ1^2 - 5 × (4 + μ2 + θp (Φ1 - Φ2) + θp μ2 (Φ1 - Φ2)) +
          μ1 (-52 - 11 θp (Φ1 - Φ2) + μ2 (19 - 5 θp Φ1 + 5 θp Φ2))) -
      w^2 (-1 + η)^2 (60 + 156 μ1 + 80 η μ1 - 84 μ1^2 - 16 η μ1^2 + 15 μ2 - 57 μ1 μ2 +
          θp (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) + 3 × (1 + μ2) ×
                (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2) + 5 η (10 × (1 + μ2) + μ1^2
                  (4 + 3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))) +
      w (-1 + η) × (60 + 156 μ1 + 160 η μ1 - 16 η^2 μ1 - 84 μ1^2 -
          32 η μ1^2 - 16 η^2 μ1^2 + 15 μ2 - 57 μ1 μ2 + θp (4 + 8 μ2 + 15 Φ1 +
              15 μ2 Φ1 + μ1 (16 + 55 Φ1 + μ2 (32 + 15 Φ1 - 39 Φ2) - 39 Φ2) -
              15 Φ2 - 15 μ2 Φ2 + 2 μ1^2 (6 + 5 Φ1 + 3 Φ2) +
              5 η^2 (2 μ2 + μ1^2 (8 + Φ1 + Φ2) + μ1 (44 - 10 μ2 + Φ1 + Φ2)) +
              η (60 + 82 μ2 + μ1^2 (42 + 31 Φ1 + 11 Φ2) +
                μ1 (222 + 91 Φ1 - 49 Φ2 - 10 μ2 (5 + 12 Φ2))))))) +
x^2 (-1 + η)^2 ((-1 + η) θp (60 η + 156 η^2 + 44 η^3 + 20 η^4 + 60 η^5 - 30 ηt -
      60 η ηt - 24 η^2 ηt - 80 η^3 ηt - 60 η^4 ηt + 48 η μ1 +
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\begin{aligned}
&252\,\eta^2\,\mu1 + 464\,\eta^3\,\mu1 + 350\,\eta^4\,\mu1 + 60\,\eta^5\,\mu1 - 32\,\eta t\,\mu1 - \\
&148\,\eta\,\eta t\,\mu1 - 120\,\eta^2\,\eta t\,\mu1 - 56\,\eta^3\,\eta t\,\mu1 - 60\,\eta^4\,\eta t\,\mu1 - \\
&12\,\eta\,\mu1^2 + 24\,\eta^2\,\mu1^2 + 180\,\eta^3\,\mu1^2 + 150\,\eta^4\,\mu1^2 + \\
&22\,\eta t\,\mu1^2 + 104\,\eta\,\eta t\,\mu1^2 + 48\,\eta^2\,\eta t\,\mu1^2 + 24\,\eta^3\,\eta t\,\mu1^2 + \\
&32\,\eta\,\mu2 + 228\,\eta^2\,\mu2 + 204\,\eta^3\,\mu2 - 10\,\eta t\,\mu2 - 27\,\eta\,\eta t\,\mu2 - \\
&24\,\eta^2\,\eta t\,\mu2 + 56\,\eta\,\mu1\,\mu2 + 12\,\eta^2\,\mu1\,\mu2 - 204\,\eta^3\,\mu1\,\mu2 - \\
&240\,\eta^4\,\mu1\,\mu2 + 38\,\eta t\,\mu1\,\mu2 + 117\,\eta\,\eta t\,\mu1\,\mu2 + \\
&192\,\eta^2\,\eta t\,\mu1\,\mu2 + 120\,\eta^3\,\eta t\,\mu1\,\mu2 + w^4\,(-1+\eta)^4 \\
&\quad \big(12\,\eta^3\,(1+\mu1) - 12\,\eta^2\,\big(-1+\eta t - 5\,\mu1 + \eta t\,\mu1 - 4\,\mu1^2 + 3\,\mu1\,\mu2\big) + \\
&\qquad 2\times\big(5 + 8\,\mu1 + 3\,\mu1^2 + 11\,\mu2 + 5\,\mu1\,\mu2\big) + \\
&\qquad \eta t\,\big(-12 - 22\,\mu1 + 38\,\mu1^2 + 5\,\mu2 + 17\,\mu1\,\mu2\big) + 2\,\eta \\
&\qquad\quad \big(16 + 37\,\mu1 + 21\,\mu1^2 + 33\,\mu2 - 27\,\mu1\,\mu2 + 6\,\eta t\,(-1 - \mu1 + 3\,\mu1\,\mu2)\big)\big) - \\
&w^3\,(-1+\eta)^3\,\big(40\,\eta^4\,(1+\mu1) + 2\times\big(20 + 31\,\mu1 + 5\,\mu1^2 + 30\,\mu2 + 6\,\mu1\,\mu2\big) - \\
&\qquad 4\,\eta^3\,\big(-21 - 61\,\mu1 - 40\,\mu1^2 + 10\,\eta t\,(1+\mu1) + 36\,\mu1\,\mu2\big) + \\
&\qquad \eta t\,\big(-66 - 130\,\mu1 + 128\,\mu1^2 + \mu2 + 97\,\mu1\,\mu2\big) + \\
&\qquad 3\,\eta\,\big(62 + 40\,\mu1^2 + 36\,\eta t\,\mu1^2 + 2\,\mu1\,(63 - 34\,\mu2) + 112\,\mu2 - \\
&\qquad\quad 9\,\eta t\,(4+\mu2) + \eta t\,\mu1\,(-64 + 87\,\mu2)\big) + 12\,\eta^2\,\big(14 + 43\,\mu1 + \\
&\qquad\quad 23\,\mu1^2 + 22\,\mu2 - 29\,\mu1\,\mu2 + \eta t\,(-7 - 7\,\mu1 + 12\,\mu1\,\mu2)\big)\big) + \\
&w^2\,(-1+\eta)^2\,\big(46 + 58\,\mu1 + 30\,\eta^5\,(1+\mu1) + 50\,\mu2 + 14\,\mu1\,\mu2 + \\
&\qquad \eta t\,\big(-124 - 224\,\mu1 + 164\,\mu1^2 - 23\,\mu2 + 181\,\mu1\,\mu2\big) - \\
&\qquad 10\,\eta^4\,\big(3\,\eta t\,(1+\mu1) - 4\times\big(4 + 7\,\mu1 + 3\,\mu1^2 - 3\,\mu1\,\mu2\big)\big) + \\
&\qquad 4\,\eta^3\,\big(70 + 255\,\mu1 + 125\,\mu1^2 + 55\,\mu2 - 161\,\mu1\,\mu2 + \\
&\qquad\quad 10\,\eta t\,(-4 - 4\,\mu1 + 3\,\mu1\,\mu2)\big) + 12\,\eta^2\,\big(38 + 106\,\mu1 + 38\,\mu1^2 + \\
&\qquad\quad 65\,\mu2 - 61\,\mu1\,\mu2 + \eta t\,\big(-15 - 23\,\mu1 + 4\,\mu1^2 - 2\,\mu2 + 40\,\mu1\,\mu2\big)\big) + \\
&\qquad \eta\,\big(2\times\big(155 + 278\,\mu1 + 51\,\mu1^2 + 249\,\mu2 - 69\,\mu1\,\mu2\big) + \\
&\qquad\quad 3\,\eta t\,\big(-80 - 164\,\mu1 + 108\,\mu1^2 - 27\,\mu2 + 177\,\mu1\,\mu2\big)\big)\big) - \\
&w\,(-1+\eta)\times\big(90\,\eta^5\,(1+\mu1) - 4\times(1+\mu1)\times(-5 + \mu1 - 3\,\mu2) + \\
&\qquad 10\,\eta^4\,\big(20 + 65\,\mu1 + 27\,\mu1^2 - 9\,\eta t\,(1+\mu1) - 36\,\mu1\,\mu2\big) + \\
&\qquad \eta t\,\big(-100 - 148\,\mu1 + 96\,\mu1^2 - 29\,\mu2 + 139\,\mu1\,\mu2\big) + \\
&\qquad 12\,\eta^2\,\big(34 + 85\,\mu1 + 21\,\mu1^2 + 62\,\mu2 - 34\,\mu1\,\mu2 + \eta t \\
&\qquad\quad \big(-11 - 27\,\mu1 + 8\,\mu1^2 - 4\,\mu2 + 44\,\mu1\,\mu2\big)\big) + 4\,\eta^3\,\big(63 + 313\,\mu1 + 130 \\
&\qquad\quad \mu1^2 + 106\,\mu2 - 176\,\mu1\,\mu2 + \eta t\,\big(-50 - 44\,\mu1 + 6\,\mu1^2 + 60\,\mu1\,\mu2\big)\big) + \\
&\qquad \eta\,\big(4\times\big(54 + 75\,\mu1 + 3\,\mu1^2 + 65\,\mu2 + 17\,\mu1\,\mu2\big) + \eta t \\
&\qquad\quad \big(-204 - 460\,\mu1 + 320\,\mu1^2 - 81\,\mu2 + 423\,\mu1\,\mu2\big)\big)\big)\big) + \\
&(-1+\eta t)\,\theta l\,\big(-10 - 60\,\eta - 60\,\eta^2 + 10\,\theta p + 30\,\eta\,\theta p - 36\,\eta^2\,\theta p - \\
&\qquad 20\,\eta^3\,\theta p + 60\,\eta^4\,\theta p - 8\,\mu1 - 64\,\eta\,\mu1 - 164\,\eta^2\,\mu1 - 80\,\eta^3\,\mu1 + \\
&\qquad 16\,\eta^4\,\mu1 + 8\,\theta p\,\mu1 + 56\,\eta\,\theta p\,\mu1 + 18\,\eta^2\,\theta p\,\mu1 - 192\,\eta^3\,\theta p\,\mu1 - \\
&\qquad 170\,\eta^4\,\theta p\,\mu1 + 2\,\mu1^2 - 4\,\eta\,\mu1^2 + 28\,\eta^2\,\mu1^2 + 16\,\eta^3\,\mu1^2 + \\
&\qquad 16\,\eta^4\,\mu1^2 - 2\,\theta p\,\mu1^2 - 10\,\eta\,\theta p\,\mu1^2 - 18\,\eta^2\,\theta p\,\mu1^2 - \\
&\qquad 52\,\eta^3\,\theta p\,\mu1^2 - 50\,\eta^4\,\theta p\,\mu1^2 - 5\,\mu2 - 20\,\eta\,\mu2 - 15\,\eta^2\,\mu2 + \\
&\qquad 10\,\theta p\,\mu2 + 44\,\eta\,\theta p\,\mu2 - 6\,\eta^2\,\theta p\,\mu2 - 72\,\eta^3\,\theta p\,\mu2 - 20\,\eta^4\,\theta p\,\mu2 + \\
&\qquad 19\,\mu1\,\mu2 + 76\,\eta\,\mu1\,\mu2 + 57\,\eta^2\,\mu1\,\mu2 - 14\,\theta p\,\mu1\,\mu2 - \\
&\qquad 112\,\eta\,\theta p\,\mu1\,\mu2 - 186\,\eta^2\,\theta p\,\mu1\,\mu2 + 100\,\eta^4\,\theta p\,\mu1\,\mu2 + \\
&\qquad 2\,w^4\,(-1+\eta)^4\,\big(\mu1^2 + 5\,\mu1\,(-2+\mu2) + 5\times(-1+\mu2) +
\end{aligned}
$$

$$
\begin{aligned}
&5\,\eta\,\left(-2+4\,\mu1^2+\mu1\,(-4+\mu2)+\mu2\right)\Big)-5\,\theta\mathrm{p}\,\Phi1-30\,\eta\,\theta\mathrm{p}\,\Phi1-\\
&30\,\eta^2\,\theta\mathrm{p}\,\Phi1-4\,\theta\mathrm{p}\,\mu1\,\Phi1-50\,\eta\,\theta\mathrm{p}\,\mu1\,\Phi1-129\,\eta^2\,\theta\mathrm{p}\,\mu1\,\Phi1-\\
&96\,\eta^3\,\theta\mathrm{p}\,\mu1\,\Phi1-10\,\eta^4\,\theta\mathrm{p}\,\mu1\,\Phi1+\theta\mathrm{p}\,\mu1^2\,\Phi1-2\,\eta\,\theta\mathrm{p}\,\mu1^2\,\Phi1-\\
&27\,\eta^2\,\theta\mathrm{p}\,\mu1^2\,\Phi1-36\,\eta^3\,\theta\mathrm{p}\,\mu1^2\,\Phi1-10\,\eta^4\,\theta\mathrm{p}\,\mu1^2\,\Phi1-\\
&5\,\theta\mathrm{p}\,\mu2\,\Phi1-30\,\eta\,\theta\mathrm{p}\,\mu2\,\Phi1-30\,\eta^2\,\theta\mathrm{p}\,\mu2\,\Phi1-5\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi1-\\
&30\,\eta\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi1-30\,\eta^2\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi1+5\,\theta\mathrm{p}\,\Phi2+30\,\eta\,\theta\mathrm{p}\,\Phi2+\\
&30\,\eta^2\,\theta\mathrm{p}\,\Phi2+4\,\theta\mathrm{p}\,\mu1\,\Phi2+40\,\eta\,\theta\mathrm{p}\,\mu1\,\Phi2+87\,\eta^2\,\theta\mathrm{p}\,\mu1\,\Phi2+\\
&44\,\eta^3\,\theta\mathrm{p}\,\mu1\,\Phi2-10\,\eta^4\,\theta\mathrm{p}\,\mu1\,\Phi2-\theta\mathrm{p}\,\mu1^2\,\Phi2-8\,\eta\,\theta\mathrm{p}\,\mu1^2\,\Phi2-\\
&15\,\eta^2\,\theta\mathrm{p}\,\mu1^2\,\Phi2-16\,\eta^3\,\theta\mathrm{p}\,\mu1^2\,\Phi2-10\,\eta^4\,\theta\mathrm{p}\,\mu1^2\,\Phi2+5\,\theta\mathrm{p}\,\mu2\,\Phi2+\\
&30\,\eta\,\theta\mathrm{p}\,\mu2\,\Phi2+30\,\eta^2\,\theta\mathrm{p}\,\mu2\,\Phi2-7\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi2-6\,\eta\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi2+\\
&102\,\eta^2\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi2+120\,\eta^3\,\theta\mathrm{p}\,\mu1\,\mu2\,\Phi2-\mathrm{w}^3\,(-1+\eta)^3\,\Big(8\,\mu1^2+\\
&\quad 3\,\eta^2\,\Big(12\,\mu1^2+\mu1\,(-52+\mu2\,(19-10\,\theta\mathrm{p}\,(\Phi1-\Phi2))-22\,\theta\mathrm{p}\,(\Phi1-\Phi2))-\\
&\qquad 5\times(4+\mu2+2\,\theta\mathrm{p}\,(\Phi1-\Phi2)+2\,\theta\mathrm{p}\,\mu2\,(\Phi1-\Phi2))\Big)+2\,\eta\\
&\quad \Big(46\,\mu1^2+\mu1\,(-128+\mu2\,(53-15\,\theta\mathrm{p}\,(\Phi1-\Phi2))-33\,\theta\mathrm{p}\,(\Phi1-\Phi2))-\\
&\qquad 5\times(12-\mu2+3\,\theta\mathrm{p}\,(\Phi1-\Phi2)+3\,\theta\mathrm{p}\,\mu2\,(\Phi1-\Phi2))\Big)-\\
&\quad 5\times(8+\mu2\,(-5+\theta\mathrm{p}\,(\Phi1-\Phi2))+\theta\mathrm{p}\,(\Phi1-\Phi2))+\\
&\quad \mu1\,(-68-11\,\theta\mathrm{p}\,(\Phi1-\Phi2)+\mu2\,(49-5\,\theta\mathrm{p}\,\Phi1+5\,\theta\mathrm{p}\,\Phi2))\Big)-\\
&\mathrm{w}^2\,(-1+\eta)^2\,\Big(-3\times\left(4\,\mu1^2+5\times(-4+\mu2)+\mu1\,(-28+29\,\mu2)\right)-\\
&\quad \theta\mathrm{p}\,\Big(-((1+\mu2)\times(-14+15\,\Phi1-15\,\Phi2))+\mu1^2\,(\Phi1-\Phi2)+\\
&\qquad 26\,\mu1\,(1-\Phi1+\Phi2)+\mu1\,\mu2\,(-34-15\,\Phi1+3\,\Phi2)\Big)+\\
&\quad 3\,\eta\,\Big(80+152\,\mu1-20\,\mu1^2+10\,\mu2-86\,\mu1\,\mu2+\theta\mathrm{p}\\
&\qquad \Big(\mu1\,(-26+61\,\Phi1+6\,\mu2\,(9+5\,\Phi1-3\,\Phi2)-57\,\Phi2)+\\
&\qquad\quad 6\times(1+\mu2)\times(-3+5\,\Phi1-5\,\Phi2)+\mu1^2\,(4+\Phi1+3\,\Phi2)\Big)\Big)+\\
&\quad 3\,\eta^2\,\Big(60+156\,\mu1-36\,\mu1^2+15\,\mu2-57\,\mu1\,\mu2+2\,\theta\mathrm{p}\\
&\qquad \Big(\mu1\,(26+44\,\Phi1+3\,\mu2\,(2+5\,\Phi1-9\,\Phi2)-36\,\Phi2)+\\
&\qquad\quad 3\times(1+\mu2)\times(2+5\,\Phi1-5\,\Phi2)+\mu1^2\,(8+5\,\Phi1+3\,\Phi2)\Big)\Big)+\\
&\quad 2\,\eta^3\,\Big(-8\times(-5+\mu1)\,\mu1+5\,\theta\mathrm{p}\,\Big(10\times(1+\mu2)+\mu1^2\\
&\qquad\quad (4+3\,\Phi1+\Phi2)+\mu1\,(26+9\,\Phi1-5\,\Phi2-2\,\mu2\,(7+6\,\Phi2))\Big)\Big)\Big)+\\
&\mathrm{w}\,(-1+\eta)\times\Big(40+44\,\mu1-8\,\mu1^2+5\,\mu2-67\,\mu1\,\mu2+2\,\eta^4\\
&\quad \Big(10\,\theta\mathrm{p}\,\mu2+\mu1^2\,(-8+5\,\theta\mathrm{p}\,(5+\Phi1+\Phi2))+\\
&\qquad \mu1\,(-8+5\,\theta\mathrm{p}\,(23-10\,\mu2+\Phi1+\Phi2))\Big)+\theta\mathrm{p}\,\Big(3\,\mu2\\
&\qquad\quad (-8+5\,\Phi1-5\,\Phi2)+5\times(-4+3\,\Phi1-3\,\Phi2)+\mu1^2\,(2-2\,\Phi1+2\,\Phi2)+\\
&\qquad \mu1\,(-30+19\,\Phi1-19\,\Phi2+3\,\mu2\,(16+5\,\Phi1+3\,\Phi2))\Big)+\\
&\quad \eta\,\Big(-4\,\mu1^2+\mu1\,(304-238\,\mu2)+50\times(4+\mu2)+\theta\mathrm{p}\,\Big(-84+90\,\Phi1+\\
&\qquad\quad \mu1\,(-134+167\,\Phi1+2\,\mu2\,(137+45\,\Phi1-9\,\Phi2)-145\,\Phi2)+\\
&\qquad\quad \mu2\,(-98+90\,\Phi1-90\,\Phi2)-90\,\Phi2+\mu1^2\,(22+5\,\Phi1+17\,\Phi2)\Big)\Big)+\\
&\quad \eta^2\,\Big(-100\,\mu1^2+\mu1\,(476-171\,\mu2)+45\times(4+\mu2)+3\,\theta\mathrm{p}\,\Big(8+30\\
&\qquad\quad \Phi1+\mu1\,(30+109\,\Phi1+\mu2\,(74+30\,\Phi1-78\,\Phi2)-79\,\Phi2)+2\,\mu2\\
&\qquad\quad (7+15\,\Phi1-15\,\Phi2)-30\,\Phi2+\mu1^2\,(19\,\Phi1+11\times(2+\Phi2))\Big)\Big)+\\
&\quad 2\,\eta^3\,\Big(-16\times(-5+\mu1)\,\mu1+\theta\mathrm{p}\,\Big(60+86\,\mu2+\mu1^2\,(46+33\,\Phi1+13\,\Phi2)+\\
&\qquad\quad \mu1\,(226+93\,\Phi1-47\,\Phi2-10\,\mu2\,(7+12\,\Phi2))\Big)\Big)\Big)\Big)\Big)+\\
&\mathrm{x}^5\,(-1+\eta)^5\,\Big(-4\times(-1+\mathrm{w}\,(-1+\eta))\times(-1+\eta\mathrm{t})\,\theta\mathrm{l}\,\mu1\,(5+\mathrm{w}\,(-1+\eta)\times\\
&\qquad (-5+\mu1)-\mu1-\eta\,(1+\mu1))+\\
&\quad \theta\mathrm{p}\,\Big(2-18\,\eta+40\,\eta^2-24\,\eta^3-8\,\eta\mathrm{t}-16\,\eta\,\eta\mathrm{t}+24\,\eta^2\,\eta\mathrm{t}-2\,\theta\mathrm{l}+
\end{aligned}
$$

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\begin{aligned}
&24\,\eta\,\theta l + 2\,\eta t\,\theta l - 24\,\eta\,\eta t\,\theta l + 44\,\mu 1 + 72\,\eta\,\mu 1 - 92\,\eta^2\,\mu 1 - \\
&24\,\eta^3\,\mu 1 - 8\,\eta t\,\mu 1 - 16\,\eta\,\eta t\,\mu 1 + 24\,\eta^2\,\eta t\,\mu 1 - 18\,\theta l\,\mu 1 - \\
&62\,\eta\,\theta l\,\mu 1 + 18\,\eta t\,\theta l\,\mu 1 + 62\,\eta\,\eta t\,\theta l\,\mu 1 + 18\,\mu 1^2 + \\
&42\,\eta\,\mu 1^2 - 60\,\eta^2\,\mu 1^2 - 4\,\theta l\,\mu 1^2 - 14\,\eta\,\theta l\,\mu 1^2 + 4\,\eta t\,\theta l\,\mu 1^2 + \\
&14\,\eta\,\eta t\,\theta l\,\mu 1^2 + 4\,w^3\,(-1+\eta)^4\,(1+\mu 1)\,(\eta - \eta t + 4\,\mu 1) + \\
&18\,\mu 2 - 18\,\eta\,\mu 2 - 6\,\theta l\,\mu 2 - 2\,\eta\,\theta l\,\mu 2 + 6\,\eta t\,\theta l\,\mu 2 + \\
&2\,\eta\,\eta t\,\theta l\,\mu 2 + 6\,\mu 1\,\mu 2 - 30\,\eta\,\mu 1\,\mu 2 + 24\,\eta^2\,\mu 1\,\mu 2 + 12\,\eta t\,\mu 1\,\mu 2 - \\
&12\,\eta\,\eta t\,\mu 1\,\mu 2 - 6\,\theta l\,\mu 1\,\mu 2 + 10\,\eta\,\theta l\,\mu 1\,\mu 2 + 6\,\eta t\,\theta l\,\mu 1\,\mu 2 - \\
&10\,\eta\,\eta t\,\theta l\,\mu 1\,\mu 2 - 9\,\theta l\,\mu 1\,\Phi 1 - \eta\,\theta l\,\mu 1\,\Phi 1 + 9\,\eta t\,\theta l\,\mu 1\,\Phi 1 + \\
&\eta\,\eta t\,\theta l\,\mu 1\,\Phi 1 - 3\,\theta l\,\mu 1^2\,\Phi 1 - \eta\,\theta l\,\mu 1^2\,\Phi 1 + 3\,\eta t\,\theta l\,\mu 1^2\,\Phi 1 + \\
&\eta\,\eta t\,\theta l\,\mu 1^2\,\Phi 1 + 5\,\theta l\,\mu 1\,\Phi 2 - \eta\,\theta l\,\mu 1\,\Phi 2 - 5\,\eta t\,\theta l\,\mu 1\,\Phi 2 + \\
&\eta\,\eta t\,\theta l\,\mu 1\,\Phi 2 - \theta l\,\mu 1^2\,\Phi 2 - \eta\,\theta l\,\mu 1^2\,\Phi 2 + \eta t\,\theta l\,\mu 1^2\,\Phi 2 + \\
&\eta\,\eta t\,\theta l\,\mu 1^2\,\Phi 2 + 12\,\theta l\,\mu 1\,\mu 2\,\Phi 2 - 12\,\eta t\,\theta l\,\mu 1\,\mu 2\,\Phi 2 - \\
&w^2\,(-1+\eta)^2\,\big(-10 + 10\,\theta l - 84\,\mu 1 + 26\,\theta l\,\mu 1 - 50\,\mu 1^2 + 4\,\theta l\,\mu 1^2 + \\
&\quad 12\,\eta^3\,(1+\mu 1) - 22\,\mu 2 + 10\,\theta l\,\mu 2 + 14\,\mu 1\,\mu 2 - 14\,\theta l\,\mu 1\,\mu 2 + \\
&\quad 4\,\eta^2\,\big(1 + 13\,\mu 1 + 12\,\mu 1^2 - 3\,\eta t\,(1+\mu 1) - 3\,\mu 1\,\mu 2\big) + \\
&\quad 2\,\eta\,\big(-3 + 10\,\mu 1 + \mu 1^2 + 11\,\mu 2 - \mu 1\,\mu 2 + \eta t\,(-2 - 2\,\mu 1 + 6\,\mu 1\,\mu 2)\big) + \\
&\quad 9\,\theta l\,\mu 1\,\Phi 1 + 3\,\theta l\,\mu 1^2\,\Phi 1 - 5\,\theta l\,\mu 1\,\Phi 2 + \theta l\,\mu 1^2\,\Phi 2 - 12\,\theta l\,\mu 1\,\mu 2\,\Phi 2 - \\
&\quad \eta t\,\big(-16 + 10\,\theta l\,(1+\mu 2) + 4\,\mu 1\,(-4 + 3\,\mu 2) + \theta l\,\mu 1^2\,(4 + 3\,\Phi 1 + \Phi 2) + \\
&\qquad \theta l\,\mu 1\,(26 + 9\,\Phi 1 - 5\,\Phi 2 - 2\,\mu 2\,(7 + 6\,\Phi 2))\big)\big) + w\,(-1+\eta)\times \\
&\big(36\,\eta^3\,(1+\mu 1) - 4\,\eta^2\,\big(4 - 27\,\mu 1^2 + 9\,\eta t\,(1+\mu 1) + \mu 1\,(-41 + 9\,\mu 2)\big) + \\
&\quad \eta\,\big(-8 + 40\,\mu 2 + 2\,\theta l\,\mu 2 + \mu 1^2\,(-56 + \theta l\,(14 + \Phi 1 + \Phi 2)) + \\
&\qquad \mu 1\,(-88 + 28\,\mu 2 + \theta l\,(86 - 10\,\mu 2 + \Phi 1 + \Phi 2)) - \\
&\qquad \eta t\,\big(-8\,\mu 1\,(2 + 3\,\mu 2) + 2\times(-8 + \theta l\,\mu 2) + \\
&\qquad\quad \theta l\,\mu 1^2\,(14 + \Phi 1 + \Phi 2) + \theta l\,\mu 1\,(86 - 10\,\mu 2 + \Phi 1 + \Phi 2)\big)\big) - \\
&\quad 2\times\big(6 + 56\,\mu 1 + 26\,\mu 1^2 + 20\,\mu 2 - 4\,\mu 1\,\mu 2 - \theta l\,\big(6 + 8\,\mu 2 + \\
&\qquad\quad \mu 1^2\,(4 + 3\,\Phi 1 + \Phi 2) + \mu 1\,(22 + 9\,\Phi 1 - 5\,\Phi 2 - 4\,\mu 2\,(1 + 3\,\Phi 2))\big) + \\
&\qquad \eta t\,\big(2\times(-5 + \mu 1\,(-5 + 6\,\mu 2)) + \theta l\,\big(6 + 8\,\mu 2 + \mu 1^2\,(4 + 3\,\Phi 1 + \Phi 2) + \\
&\qquad\quad \mu 1\,(22 + 9\,\Phi 1 - 5\,\Phi 2 - 4\,\mu 2\,(1 + 3\,\Phi 2))\big)\big)\big)\big)\big)\big) - \\
&x\,(-1+\eta)\times\big(4\,w^2\,\big(3 - 5\,w + 2\,w^2\big)\,\eta^9\,\theta p\,(1+\mu 1) - 4\,w\,\eta^8\,\theta p\,\big(9\times(1+\mu 1) + \\
&\quad w^3\,\big(7 - \mu 1 - 8\,\mu 1^2 + 2\,\eta t\,(1+\mu 1) + 9\,\mu 1\,\mu 2\big) + \\
&\quad w\,\big(-11 - 23\,\mu 1 - 12\,\mu 1^2 + 3\,\eta t\,(1+\mu 1) + 15\,\mu 1\,\mu 2\big) - \\
&\quad w^2\,\big(6 - 14\,\mu 1 - 20\,\mu 1^2 + 5\,\eta t\,(1+\mu 1) + 24\,\mu 1\,\mu 2\big)\big) - \\
&(1+w)^3\,\big(5\,w\,\theta l\,(1+\mu 1)\,\mu 2 - 5\,w\,\eta t\,\theta l\,(1+\mu 1)\,\mu 2 + \\
&\quad \eta t\,\theta p\,\big(2\,\mu 1^2 + 2\,w\,\big(7\,\mu 1^2 + 5\,\mu 1\,(-2+\mu 2) + 5\times(-1+\mu 2)\big) - \\
&\qquad 5\times(2+\mu 2) + \mu 1\,(-8 + 19\,\mu 2)\big)\big) + 2\,\eta^7\,\theta p\,\big(12\times(1+\mu 1) + 2\,w\,\big(-7 - 52\,\mu 1 - 27\,\mu 1^2 + 9\,\eta t\,(1+\mu 1) + 45\,\mu 1\,\mu 2\big) - \\
&\quad 2\,w^3\,\big(6 - 16\,\mu 1 - 34\,\mu 1^2 + 44\,\mu 2 + 23\,\mu 1\,\mu 2 + 6\,\eta t\,(1 + \mu 1 + 4\,\mu 1\,\mu 2)\big) + \\
&\quad w^4\,\big(27 - 32\,\mu 1 - 59\,\mu 1^2 + 33\,\mu 2 + 57\,\mu 1\,\mu 2 + 2\,\eta t\,(7 + 7\,\mu 1 + 9\,\mu 1\,\mu 2)\big) + \\
&\quad w^2\,\big(-17 + 96\,\mu 1 + 53\,\mu 1^2 + 55\,\mu 2 - 113\,\mu 1\,\mu 2 + \\
&\qquad \eta t\,(-22 - 22\,\mu 1 + 30\,\mu 1\,\mu 2)\big)\big) + \\
&\eta^2\,\big(\theta p\,\big(-60 + (12 - 56\,\eta t)\,\mu 1^2 - 28\,\mu 2 + 7\,\eta t\,\mu 2 - \mu 1\,(48 - 88\,\eta t + 76\,\mu 2 + \\
&\qquad\quad 41\,\eta t\,\mu 2) - 2\,w\,\big(3\,\eta t\,\big(26 + 14\,\mu 1 + 8\,\mu 1^2 + 5\,\mu 2 - 11\,\mu 1\,\mu 2\big) + \\
&\qquad\quad 2\times\big(34 + 59\,\mu 1 + 7\,\mu 1^2 + 52\,\mu 2 + 10\,\mu 1\,\mu 2\big)\big) +
\end{aligned}
$$

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        2 w^4 (33 + 42 μ1 + 9 μ1^2 + 77 μ2 + 83 μ1 μ2 + ηt
              (-4 - 4 μ1 + 90 μ1^2 - 25 μ2 + 17 μ1 μ2)) +
        2 w^2 (-19 - 106 μ1 - 51 μ1^2 - 99 μ2 + 123 μ1 μ2 + 3 ηt
              (-54 - 100 μ1 + 44 μ1^2 - 17 μ2 + 49 μ1 μ2)) +
        w^3 (8 × (16 + 14 μ1 - 5 μ1^2 + 18 μ2 + 42 μ1 μ2) + ηt
              (-180 - 440 μ1 + 436 μ1^2 - 115 μ2 + 221 μ1 μ2))) +
    (-1 + ηt) θl (w^3 (60 + 100 μ1^2 + μ1 (76 - 49 μ2) - 25 μ2) +
        w^4 (30 + 60 μ1 + 54 μ1^2 - 5 μ2 - 5 μ1 μ2) -
        2 × (7 μ1^2 + μ1 (16 - 19 μ2) + 5 × (3 + μ2)) -
        4 w (15 + 27 μ1 + 9 μ1^2 + 5 μ2 - 13 μ1 μ2 + θp
              (-11 + 15 Φ1 + μ1 (-19 + 32 Φ1 + μ2 (47 + 15 Φ1 - 9 Φ2) - 27 Φ2) +
                μ2 (-13 + 15 Φ1 - 15 Φ2) - 15 Φ2 + μ1^2 (4 + 2 Φ1 + 3 Φ2))) -
        θp (μ2 (-46 + 30 Φ1 - 30 Φ2) + 30 × (-1 + Φ1 - Φ2) +
            μ1^2 (8 + Φ1 + 7 Φ2) + μ1 (-58 + 49 Φ1 - 41 Φ2 + 2 μ2 (61 + 15 Φ1 +
                  3 Φ2))) - w^2 (6 × (-4 μ1^2 + 5 μ2 + 5 μ1 (2 + μ2)) +
            θp (μ1 (26 + 79 Φ1 + μ2 (26 + 30 Φ1 - 42 Φ2) - 67 Φ2) +
                2 × (1 + μ2) × (1 + 15 Φ1 - 15 Φ2) + μ1^2 (12 + 7 Φ1 + 5 Φ2)))))) -
η (θp (ηt (-50 - 56 μ1 + 18 μ1^2 - 15 μ2 + 57 μ1 μ2) + 2 w^3
          (ηt (14 + 6 μ1 + 10 μ1^2 - 49 μ2 - μ1 μ2) +
            2 × (20 + 31 μ1 + 5 μ1^2 + 30 μ2 + 6 μ1 μ2)) +
        w^4 (4 × (5 + 8 μ1 + 3 μ1^2 + 11 μ2 + 5 μ1 μ2) - 2 ηt
              (-13 - 28 μ1 + 3 μ1^2 + 20 μ2 + 8 μ1 μ2)) + 4 w (-2 × (1 + μ1) ×
              (-5 + μ1 - 3 μ2) + ηt (-30 - 52 μ1 + 17 μ1^2 - 12 μ2 + 36 μ1 μ2)) +
        w^2 (4 × (23 + 29 μ1 + 25 μ2 + 7 μ1 μ2) + ηt (-68 - 196 μ1 +
                76 μ1^2 - 91 μ2 + 101 μ1 μ2))) + (-1 + ηt) θl
      (10 + 8 μ1 - 2 μ1^2 + 5 μ2 - 19 μ1 μ2 + 10 w^4 (1 + μ1) × (1 + μ1 + μ2) +
        2 w^3 (14 μ1^2 + 5 × (4 + μ2 (2 + θp (Φ1 - Φ2)) + θp (Φ1 - Φ2)) +
            μ1 (34 + μ2 (-2 + 5 θp (Φ1 - Φ2)) + 11 θp (Φ1 - Φ2))) -
        2 θp μ1^2 (-2 + Φ1 - Φ2) + 10 θp (1 + μ2) × (-2 + Φ1 - Φ2) +
        2 θp μ1 (5 μ2 Φ1 + 4 × (-2 + Φ1 - Φ2) + 7 μ2 (2 + Φ2)) +
        w^2 (3 × (8 μ1^2 + μ1 (28 - 19 μ2) + 5 × (4 + μ2)) -
            2 θp (-((1 + μ2) × (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
                26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2))) +
        w (40 + 44 μ1 + 4 μ1^2 + 10 μ2 - 62 μ1 μ2 + θp (6 μ2 (-8 + 5 Φ1 -
                  5 Φ2) + 10 × (-4 + 3 Φ1 - 3 Φ2) + μ1^2 (4 - 4 Φ1 + 4 Φ2) +
                2 μ1 (-30 + 19 Φ1 - 19 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2))))))) +
η^4 (78 θp + 24 ηt θp + 10 θl θp - 10 ηt θl θp + 20 θl μ1 - 20 ηt θl μ1 -
    68 θp μ1 - 56 ηt θp μ1 + 98 θl θp μ1 - 98 ηt θl θp μ1 -
    4 θl μ1^2 + 4 ηt θl μ1^2 - 74 θp μ1^2 + 16 ηt θp μ1^2 +
    28 θl θp μ1^2 - 28 ηt θl θp μ1^2 + 46 θp μ2 - 16 ηt θp μ2 +
    38 θl θp μ2 - 38 ηt θl θp μ2 + 154 θp μ1 μ2 +
    68 ηt θp μ1 μ2 - 10 θl θp μ1 μ2 + 10 ηt θl θp μ1 μ2 +
    w^4 ((-1 + ηt) θl (124 μ1^2 - 5 × (4 + μ2) - 5 μ1 (8 + μ2)) +
```

$$
\begin{aligned}
&2\,\theta p\,\big(-2\times\big(22+57\,\mu1+35\,\mu1^2+55\,\mu2-170\,\mu1\,\mu2\big)+\\
&\quad 5\,\eta t\,\big(-11-26\,\mu1+57\,\mu1^2+5\,\mu2-7\,\mu1\,\mu2\big)\big)\big)+49\,\theta l\,\theta p\,\mu1\,\Phi1-\\
&49\,\eta t\,\theta l\,\theta p\,\mu1\,\Phi1+19\,\theta l\,\theta p\,\mu1^2\,\Phi1-19\,\eta t\,\theta l\,\theta p\,\mu1^2\,\Phi1-\\
&w^3\,\big(\theta p\,\big(8\times\big(47-2\,\mu1^2+\mu1\,(63-58\,\mu2)+104\,\mu2\big)+\\
&\quad \eta t\,\big(44-236\,\mu1^2-145\,\mu2+\mu1\,(24+455\,\mu2)\big)\big)-(-1+\eta t)\,\theta l\\
&\quad \big(64\,\mu1^2+\mu1\,(-160+\mu2\,(53-20\,\theta p\,(\Phi1-\Phi2))-44\,\theta p\,(\Phi1-\Phi2))-\\
&\quad 5\times(16-\mu2+4\,\theta p\,(\Phi1-\Phi2)+4\,\theta p\,\mu2\,(\Phi1-\Phi2))\big)\big)-\\
&21\,\theta l\,\theta p\,\mu1\,\Phi2+21\,\eta t\,\theta l\,\theta p\,\mu1\,\Phi2+9\,\theta l\,\theta p\,\mu1^2\,\Phi2-9\,\eta t\,\theta l\\
&\theta p\,\mu1^2\,\Phi2-60\,\theta l\,\theta p\,\mu1\,\mu2\,\Phi2+60\,\eta t\,\theta l\,\theta p\,\mu1\,\mu2\,\Phi2+\\
&w\,\big(\theta p\,\big(4\times\big(49+16\,\mu1^2+\mu1\,(107-68\,\mu2)+130\,\mu2\big)+\\
&\quad \eta t\,\big(128-132\,\mu1^2+17\,\mu2+\mu1\,(116+161\,\mu2)\big)\big)+\\
&\quad (-1+\eta t)\,\theta l\,\big(60+120\,\mu1+15\,\mu2-57\,\mu1\,\mu2+\theta p\,\big(-44+60\,\Phi1+\\
&\quad \mu1\,(-170+123\,\Phi1+\mu2\,(238+60\,\Phi1-36\,\Phi2)-113\,\Phi2)+\\
&\quad \mu2\,(-62+60\,\Phi1-60\,\Phi2)-60\,\Phi2+\mu1^2\,(-6+3\,\Phi1+7\,\Phi2)\big)\big)\big)+\\
&w^2\,\big(-\big((-1+\eta t)\,\theta l\,\big(44\,\mu1^2-15\,\mu2-\mu1\,(64+15\,\mu2)\big)\big)+\\
&\quad \theta p\,\big(-48+500\,\mu1+356\,\mu1^2+56\,\mu2-832\,\mu1\,\mu2-\\
&\quad 2\,\theta l\,\big(\mu1\,(78+62\,\Phi1+\mu2\,(-22+15\,\Phi1-51\,\Phi2)-46\,\Phi2)+\\
&\quad (1+\mu2)\times(26+15\,\Phi1-15\,\Phi2)+\mu1^2\,(16+11\,\Phi1+5\,\Phi2)\big)+\\
&\quad \eta t\,\big(192+556\,\mu1-440\,\mu1^2+149\,\mu2-331\,\mu1\,\mu2+2\,\theta l\,\big(\mu1\,(78+\\
&\quad 62\,\Phi1+\mu2\,(-22+15\,\Phi1-51\,\Phi2)-46\,\Phi2)+(1+\mu2)\times\\
&\quad (26+15\,\Phi1-15\,\Phi2)+\mu1^2\,(16+11\,\Phi1+5\,\Phi2)\big)\big)\big)\big)\big)+\\
&\eta^3\,\big(\theta p\,\big(-4\times\big(11+7\,\mu1^2+\mu1\,(30-17\,\mu2)+31\,\mu2\big)+\eta t\,\big(44\,\mu1^2-\\
&\quad 11\times(4+\mu2)-\mu1\,(72+11\,\mu2)\big)-\\
&\quad 4\,w^3\,\big(-40-108\,\mu1-44\,\mu1^2-112\,\mu2+203\,\mu1\,\mu2+\\
&\quad \eta t\,\big(-64-144\,\mu1+166\,\mu1^2+5\,\mu2+5\,\mu1\,\mu2\big)\big)-2\,w^4\,\big(21-8\,\mu1-29\\
&\quad \mu1^2+55\,\mu2+247\,\mu1\,\mu2+\eta t\,\big(-44-94\,\mu1+250\,\mu1^2+30\,\mu1\,\mu2\big)\big)+\\
&\quad 4\,w\,\big(-2\times\big(-14+15\,\mu1+17\,\mu1^2+\mu2-59\,\mu1\,\mu2\big)+\\
&\quad \eta t\,\big(-30-104\,\mu1+79\,\mu1^2-18\,\mu2+54\,\mu1\,\mu2\big)\big)+\\
&\quad 2\,w^2\,\big(171+232\,\mu1+\mu1^2+337\,\mu2+7\,\mu1\,\mu2+\eta t\\
&\quad \big(42-16\,\mu1+56\,\mu1^2-37\,\mu2+137\,\mu1\,\mu2\big)\big)\big)-(-1+\eta t)\,\theta l\\
&\quad \big(20+56\,\mu1+4\,w^4\,\big(5+29\,\mu1^2-5\,\mu1\,(-2+\mu2)-5\,\mu2\big)+5\,\mu2-\\
&\quad 19\,\mu1\,\mu2+\theta p\,\big(\mu1\,(-14+85\,\Phi1+2\,\mu2\,(67+10\,\Phi1-34\,\Phi2)-59\,\Phi2)+\\
&\quad \mu1^2\,(10+17\,\Phi1+9\,\Phi2)+2\times(12+\mu2+10\,\Phi1+10\,\mu2\,\Phi1-10\,\Phi2-\\
&\quad 10\,\mu2\,\Phi2)\big)+8\,w^3\,\big(16\,\mu1^2-5\times(1+\mu2)\times(1+\theta p\,(\Phi1-\Phi2))+\\
&\quad \mu1\,(-16+\mu2-11\,\theta p\,\Phi1-5\,\theta p\,\mu2\,\Phi1+11\,\theta p\,\Phi2+5\,\theta p\,\mu2\,\Phi2)\big)+\\
&\quad 2\,w^2\,\big(-3\times\big(6\,\mu1^2+\mu1\,(36-19\,\mu2)+5\times(4+\mu2)\big)+\\
&\quad \theta p\,\big(-((1+\mu2)\times(-52+45\,\Phi1-45\,\Phi2))+\mu1^2\,(4+6\,\Phi1-2\,\Phi2)-\\
&\quad \mu1\,(-104+69\,\Phi1-73\,\Phi2+\mu2\,(116+45\,\Phi1+3\,\Phi2))\big)\big)+\\
&\quad w\,\big(-48\,\mu1^2-10\times(4+\mu2)+\mu1\,(8+62\,\mu2)+\theta p\,\big(100-30\,\Phi1-\\
&\quad 6\,\mu2\,(-21+5\,\Phi1-5\,\Phi2)+30\,\Phi2+\mu1^2\,(22+33\,\Phi1+5\,\Phi2)-\\
&\quad \mu1\,(-194-51\,\Phi1+13\,\Phi2+6\,\mu2\,(21+5\,\Phi1+23\,\Phi2))\big)\big)\big)\big)+\\
&\eta^5\,\big(4\times(-1+\eta t)\,\theta l\,\mu1\,(1+\mu1)-2\,w^4\,\big((-1+\eta t)\,\theta l\,\big(33\,\mu1^2+\\
&\quad 5\,\mu1\,(-6+\mu2)+5\times(-3+\mu2)\big)+
\end{aligned}
$$

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        θp (-20 × (4 + μ1^2 + μ1 (5 - 10 μ2) + 11 μ2) + ηt
            (153 μ1^2 + 5 × (-7 + 4 μ2) - 20 μ1 (4 + 5 μ2))) +
    θp (2 × (5 + 15 μ1^2 + μ1 (44 - 13 μ2) + 53 μ2) + 4 ηt (-4 + 4 μ1^2 +
          15 μ1 μ2) + θl (-24 + 10 μ2 + 5 μ1 (14 - 10 μ2 + Φ1 + Φ2) +
          μ1^2 (22 + 5 Φ1 + 5 Φ2)) - ηt θl (-24 + 10 μ2 +
          5 μ1 (14 - 10 μ2 + Φ1 + Φ2) + μ1^2 (22 + 5 Φ1 + 5 Φ2)) -
    2 w^3 (2 × (-1 + ηt) θl (μ1^2 - μ1 (-7 + μ2) + 5 μ2) + θp
        (-62 + 162 μ1^2 - 84 μ2 - 15 θl Φ1 - 15 θl μ2 Φ1 +
          μ1 (112 - 3 μ2 (64 + 5 θl (Φ1 - Φ2)) - 33 θl (Φ1 - Φ2)) +
          15 θl Φ2 + 15 θl μ2 Φ2 + ηt (22 - 70 μ1^2 + 15 θl Φ1 +
            5 μ2 (11 + 3 θl (Φ1 - Φ2)) + μ1 (126 + μ2 (-137 +
                15 θl (Φ1 - Φ2)) + 33 θl (Φ1 - Φ2)) - 15 θl Φ2))) +
    w^2 (3 θp (-4 × (19 + 9 μ1^2 + μ1 (46 - 36 μ2) + 61 μ2) + ηt
            (-36 + 52 μ1^2 - 11 μ2 - μ1 (56 + 83 μ2))) +
        (-1 + ηt) θl (4 μ1^2 - 15 × (4 + μ2) + μ1 (-116 + 57 μ2) +
          2 θp (-2 × (1 + μ2) × (-19 + 15 Φ1 - 15 Φ2) + μ1^2 (4 + 5 Φ1 - Φ2) -
            μ1 (-78 + 43 Φ1 - 47 Φ2 + μ2 (82 + 30 Φ1 + 6 Φ2)))) +
    w (-4 × (-1 + ηt) θl (-11 + μ1) μ1 + θp (4 × (-21 + 61 μ1^2 +
            μ1 (82 - 103 μ2) - 16 μ2) - θl (60 + 78 μ2 + μ1^2 (26 + 29 Φ1 +
                9 Φ2) + μ1 (134 + 89 Φ1 - 51 Φ2 - 30 μ2 (1 + 4 Φ2))) +
          ηt (-4 × (19 + 8 μ1^2 - 8 μ2 + 7 μ1 (-3 + 4 μ2)) +
            θl (60 + 78 μ2 + μ1^2 (26 + 29 Φ1 + 9 Φ2) +
                μ1 (134 + 89 Φ1 - 51 Φ2 - 30 μ2 (1 + 4 Φ2))))))) +
η^6 (-4 θp (2 - 15 μ1^2 + 6 ηt (1 + μ1) + μ1 (-31 + 30 μ2)) +
    w^4 ((-1 + ηt) θl (14 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2)) +
        2 θp (-55 + 6 μ1 + 61 μ1^2 - 143 μ2 - 5 μ1 μ2 +
          ηt (-22 - 32 μ1 + 32 μ1^2 + 5 μ2 - 73 μ1 μ2))) +
    w^3 (θp (8 × (8 + 17 μ1^2 + μ1 (40 - 44 μ2) + 46 μ2) + ηt
            (4 - 84 μ1^2 + 27 μ2 + μ1 (88 + 123 μ2))) - (-1 + ηt) θl
        (4 μ1^2 + μ1 (-52 + μ2 (19 - 20 θp (Φ1 - Φ2)) - 44 θp (Φ1 - Φ2)) -
          5 × (4 + μ2 + 4 θp (Φ1 - Φ2) + 4 θp μ2 (Φ1 - Φ2))) +
    w (-4 × (-1 + ηt) θl μ1 (1 + μ1) + θp (16 - 2 × (108 + 5 θl) μ2 +
          μ1 (-124 + 96 μ2 + θl (-94 + 50 μ2 - 5 Φ1 - 5 Φ2)) -
          μ1^2 (44 + θl (22 + 5 Φ1 + 5 Φ2)) +
          ηt (28 + 10 θl μ2 + μ1^2 (-16 + θl (22 + 5 Φ1 + 5 Φ2)) +
            μ1 (12 - 120 μ2 + θl (94 - 50 μ2 + 5 Φ1 + 5 Φ2)))) +
    w^2 (4 × (-1 + ηt) θl (-5 + μ1) μ1 + θp (42 - 380 μ1 - 302 μ1^2 +
          190 μ2 + 454 μ1 μ2 + 5 θl (10 × (1 + μ2) + μ1^2 (4 + 3 Φ1 + Φ2) +
            μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))) +
          ηt (4 × (21 + 8 μ1^2 - 4 μ2 + 5 μ1 (1 + 7 μ2)) -
            5 θl (10 × (1 + μ2) + μ1^2 (4 + 3 Φ1 + Φ2) +
                μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)))))))))) /
```

$$\Big(96\,(-1+w\,(-1+\eta))^3\,(x\,(-1+\eta)-\eta)^3\,(1+x+\eta-x\,\eta)^2$$
$$(w+$$
$$x+$$
$$\eta-$$
$$w$$
$$\eta-x$$
$$\eta)^3\,(-1+\eta t)\,\theta l\,\theta p\Big)\Big)$$

$$\beta\eta =$$
$$\Big((-1+\eta)\,\eta\,\Big(c\sigma^2\,(-1+\eta)\times\Big(-5\,x-4\,x^2-5\,\eta-3\,x\,\eta+8\,x^2\,\eta-4\,\eta^2+8\,x\,\eta^2-4\,x^2\,\eta^2-4\,x\,\mu1+2$$
$$x^2\,\mu1-4\,\eta\,\mu1+8\,x\,\eta\,\mu1-3\,x^2\,\eta\,\mu1+2\,\eta^2\,\mu1-2\,x\,\eta^2\,\mu1+\eta^3\,\mu1-2\,x\,\eta^3\,\mu1+$$
$$x^2\,\eta^3\,\mu1+x\,\mu1^2-3\,x^2\,\mu1^2+\eta\,\mu1^2-7\,x\,\eta\,\mu1^2+7\,x^2\,\eta\,\mu1^2-3\,\eta^2\,\mu1^2+$$
$$8\,x\,\eta^2\,\mu1^2-5\,x^2\,\eta^2\,\mu1^2+\eta^3\,\mu1^2-2\,x\,\eta^3\,\mu1^2+x^2\,\eta^3\,\mu1^2-2\,x\,\mu2-\eta\,\mu2+$$
$$2\,x\,\eta\,\mu2-8\,x\,\mu1\,\mu2-13\,\eta\,\mu1\,\mu2+8\,x\,\eta\,\mu1\,\mu2+9\,w^3\,(-1+\eta)^3\,(1+2\,\mu1\,\mu2)+$$
$$w\,(-1+\eta)\times\Big(5+x^2\,(-1+\eta)^2\,(-2+\mu1)^2+4\,\mu1-\mu1^2-\eta^2\,\big(-4+6\,\mu1+\mu1^2\big)+$$
$$18\,\mu1\,\mu2+2\,x\,(-1+\eta)\times\big(-9-2\,\mu1-2\,\mu1^2+\eta\,(-4+5\,\mu1)-2\,\mu2-8\,\mu1\,\mu2\big)+$$
$$2\,\eta\,\big(9+2\,\mu1+2\,\mu1^2+\mu2+13\,\mu1\,\mu2\big)\Big)+w^2\,(-1+\eta)^2\,\big(-14-6\,\mu1-\mu1^2-36\,\mu1\,\mu2-$$
$$\eta\,(13-5\,\mu1+\mu2+13\,\mu1\,\mu2)+x\,(-1+\eta)\times\big(13+\mu1^2+2\,\mu2+\mu1\,(-4+8\,\mu2)\big)\Big)\Big)-$$
$$(-1+w\,(-1+\eta))^2\,(w+x+\eta-w\,\eta-x\,\eta)^2\,(24+f\,\theta l\,(-4+\Phi2))\Big)\Big)\Big/$$
$$\Big(12\,(-1+w\,(-1+\eta))^2\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)^2\Big)$$

$$\beta\eta t =$$
$$\frac{1}{24}\,\eta t\,\Big(\Big(2\,c\sigma^2\,(-1+\eta)^2\,\Big(x\,(w\,(-1+\eta)-2\,\eta)\,(-1+\eta)\,\theta p\,\big(4+2\,\mu1+7\,\mu1^2\big)+x^2\,(-1+\eta)^2\,\theta p$$
$$\big(4+2\,\mu1+7\,\mu1^2\big)+\eta^2\,\theta p\,\big(4+2\,\mu1+7\,\mu1^2\big)+$$
$$x\,(-1+w\,(-1+\eta))\times(-1+\eta t)\,\theta l\,\big(5-2\,\mu1+11\,\mu1^2\big)+\eta t\,\theta p\,\big(5-2\,\mu1+11\,\mu1^2\big)-$$
$$w\,(-1+\eta)\,\theta p\,\big(\eta\,\big(4+2\,\mu1+7\,\mu1^2\big)+\eta t\,\big(5-2\,\mu1+11\,\mu1^2\big)\big)\Big)\Big)\Big/$$
$$((-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,\theta p)+$$
$$(-1+\eta t)\times\big(-48+f\,\theta l^2\,\big(8-4\,\Phi2+5\,\Phi2^2\big)\big)\Big)$$

$$\beta r=\frac{9\,u}{2}-\frac{1}{4}\,r\,\big(-8+c v^2+18\,u\big)+$$
$$\Big(f\,(-1+\eta)\times\Big(36\,(1+w-w\,\eta)^2\,(x+\eta-x\,\eta)^2\,(w+x+\eta-w\,\eta-x\,\eta)^2$$
$$\big(-4\,x^2\,(-1+\eta)^2\,(-1+\eta+\theta l-\eta t\,\theta l)\,\theta p+\theta p\,\big(-4\,\eta^3+2\,\eta t+4\,\eta^2\,(1+(-1+\eta t)\,\theta l)+$$
$$\eta\,(-\theta l\,(2+\Phi1+\Phi2)+\eta t\,(-2+\theta l\,(2+\Phi1+\Phi2)))+w\,(-1+\eta)\times$$
$$\big(4\,\eta^2-2\,\eta t+\eta\,(-4+2\,\eta t+\theta l\,(6+\Phi1+\Phi2)-\eta t\,\theta l\,(6+\Phi1+\Phi2))\big)\big)+$$
$$x\,(-1+\eta)\times(-4\,(w\,(-1+\eta)-2\,\eta)\,(-1+\eta)\,\theta p+(-1+\eta t)\,\theta l$$
$$(2-\theta p\,(2+8\,\eta+\Phi1+\Phi2)+w\,(-1+\eta)\times(-2+\theta p\,(6+\Phi1+\Phi2))))\big)+$$
$$r\,\Big(2\,w^5\,(-1+\eta)^5\,\Big(2\,x^3\,(-1+\eta)^3\,\Big((-1+\eta)\times\big(28+10\,\eta^2+\eta\,(11-10\,\eta t)-11\,\eta t\big)$$
$$\theta p-(-1+\eta t)\,\theta l\,(-26+9\,\theta p\,(6+\Phi1+\Phi2))\Big)-$$
$$3\,x^2\,(-1+\eta)^2\,\big(20\,\eta^4\,\theta p+\eta^3\,(2-20\,\eta t)\,\theta p-2\,\eta^2\,(-17+\eta t)\,\theta p-15\,\eta t\,\theta p+$$
$$\eta\,(-56+37\,\eta t)\,\theta p-\eta\,(-1+\eta t)\,\theta l\,(-37+18\,\theta p\,(6+\Phi1+\Phi2))\big)+$$
$$x\,(-1+\eta)\,\eta\,\big(60\,\eta^4\,\theta p+\eta^3\,(6-60\,\eta t)\,\theta p-6\,\eta^2\,(-17+\eta t)\,\theta p-91\,\eta t\,\theta p+$$
$$\eta\,(-168+157\,\eta t)\,\theta p-\eta\,(-1+\eta t)\,\theta l\,(-65+54\,\theta p\,(6+\Phi1+\Phi2))\big)-$$
$$2\,\eta^2\,\theta p\,\big(10\,\eta^4+\eta^3\,(1-10\,\eta t)-\eta^2\,(-17+\eta t)-26\,\eta t+$$
$$\eta\,(-28+9\,\theta l\,(6+\Phi1+\Phi2)+\eta t\,(37-9\,\theta l\,(6+\Phi1+\Phi2)))\big)\Big)+$$

```
(x + η - x η)^2 (4 x^4 (-1 + η)^4 θp (12 + 30 η^3 - 2 η^2 (24 - 5 θl + 5 ηt (2 + θl)) -
      4 θl (3 + 2 Φ2) + η (6 + ηt (29 + θl (9 - 2 Φ2)) + θl (-9 + 2 Φ2)) +
      ηt (-9 + 4 θl (3 + 2 Φ2))) - 4 x^3 (-1 + η)^3
    (4 × (-1 + η) η (-12 + 30 η^2 + 9 ηt - 2 η (9 + 10 ηt)) θp - (-1 + ηt) θl
       (-10 + θp (10 + 40 η^3 - 3 Φ1 + 5 Φ2 + 4 η^2 (-9 + 2 Φ2) - 16 η (3 + 2 Φ2)))) +
   η^2 θp (120 η^5 - 42 ηt - 8 η^4 (24 - 5 θl + 5 ηt (2 + θl)) +
      3 η (14 ηt - θl Φ1 + 7 θl (2 + Φ2) + ηt θl (Φ1 - 7 × (2 + Φ2))) -
      4 η^3 (-6 + θl (9 - 2 Φ2) + ηt (-29 + θl (-9 + 2 Φ2))) +
      4 η^2 (12 - 4 θl (3 + 2 Φ2) + ηt (-9 + 4 θl (3 + 2 Φ2)))) -
   8 x (-1 + η) η (60 η^5 θp - 7 ηt θp - 4 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp +
      2 η^3 θp (6 + ηt (29 + θl (9 - 2 Φ2)) + θl (-9 + 2 Φ2)) +
      η (7 ηt θp + (-1 + ηt) θl (7 + 3 θp Φ1 - 7 θp (2 + Φ2))) +
      2 η^2 θp (12 - 4 θl (3 + 2 Φ2) + ηt (-9 + 4 θl (3 + 2 Φ2)))) +
   x^2 (-1 + η)^2 (720 η^5 θp - 50 ηt θp - 48 η^4 (24 - 5 θl + 5 ηt (2 + θl)) θp +
      η (50 ηt θp + (-1 + ηt) θl (60 + 33 θp Φ1 - 55 θp (2 + Φ2))) -
      24 η^3 θp (-6 + θl (9 - 2 Φ2) + ηt (-29 + θl (-9 + 2 Φ2))) +
      24 η^2 θp (12 - 4 θl (3 + 2 Φ2) + ηt (-9 + 4 θl (3 + 2 Φ2)))) +
3 w^4 (-1 + η)^4 (4 x^4 (-1 + η)^4 ((-1 + η) × (28 + 10 η^2 + η (11 - 10 ηt) - 11 ηt)
       θp - 4 × (-1 + ηt) θl (-2 + 9 θp)) + x^3 (-1 + η)^3
    (-4 × (-1 + η) × (-8 + 40 η^3 + η (123 - 54 ηt) + η^2 (54 - 40 ηt) + 7 ηt) θp +
       (-1 + ηt) θl (-104 - 110 η + 36 θp (2 + Φ1 + Φ2) + 9 η θp (70 + Φ1 + Φ2))) +
   η^2 θp (40 η^5 + η^3 (72 - 44 ηt) + η^4 (44 - 40 ηt) - 104 ηt +
      η (32 + 62 ηt + 36 θl (2 + Φ1 + Φ2) - 36 ηt θl (2 + Φ1 + Φ2)) +
      η^2 (-188 + 9 θl (22 + Φ1 + Φ2) - 9 ηt (-14 + θl (22 + Φ1 + Φ2)))) +
   x^2 (-1 + η)^2 (240 η^5 θp + 12 η^3 (35 - 12 ηt) θp - 90 ηt θp + 4 η (24 + ηt) θp -
      48 η^4 (-3 + 5 ηt) θp - 6 η (-1 + ηt) θl (-37 + 18 θp (2 + Φ1 + Φ2)) +
      η^2 (10 × (-90 + 47 ηt) θp - (-1 + ηt) θl (-136 + 27 θp (38 + Φ1 + Φ2)))) -
   x (-1 + η) η (160 η^5 θp - 182 ηt θp - 8 η^4 (-17 + 20 ηt) θp - 4 η^3 (-71 + 34 ηt)
       θp + 2 η (48 + 41 ηt) θp - 2 η (-1 + ηt) θl (-65 + 54 θp (2 + Φ1 + Φ2)) + η^2
       (4 × (-169 + 99 ηt) θp - (-1 + ηt) θl (-58 + 9 θp (82 + 3 Φ1 + 3 Φ2)))) +
w (x (-1 + η) - η) (-1 + η) × (-4 x^5 (-1 + η)^5 θp (30 η^3 + η^2 (3 - 30 ηt) +
      2 × (12 + ηt - 6 θl (2 + Φ2) + 6 ηt θl (2 + Φ2)) +
      η (-57 + θl (31 + 2 Φ2) + ηt (28 - θl (31 + 2 Φ2)))) +
   η^2 θp (120 η^6 + η^5 (372 - 120 ηt) - 134 ηt + η (8 ηt + 27 θl Φ1 -
         27 ηt θl Φ1 + 67 θl (2 + Φ2) - 67 ηt θl (2 + Φ2)) -
      4 η^4 (201 - θl (61 + 2 Φ2) + ηt (32 + θl (61 + 2 Φ2))) +
      4 η^3 (42 - 3 θl (17 + 2 Φ2) + ηt (89 + θl (51 + 6 Φ2))) +
      3 η^2 (48 - θl (6 + 3 Φ1 + 11 Φ2) + ηt (6 + θl (6 + 3 Φ1 + 11 Φ2)))) +
   4 x^4 (-1 + η)^4 ((-1 + η) × (150 η^3 + η^2 (255 - 150 ηt) +
         9 × (-4 + 3 ηt) - 2 η (87 + 35 ηt)) θp - (-1 + ηt) θl
       (-30 + θp (5 η^2 (37 + 2 Φ2) - 3 × (2 + 3 Φ1 + 3 Φ2) - 3 η (49 + 18 Φ2)))) -
   x (-1 + η) η (600 η^6 θp - 190 ηt θp - 300 η^5 (-5 + 2 ηt) θp -
      2 η (52 ηt θp + (-1 + ηt) θl (-87 + 27 θp Φ1 + 91 θp (2 + Φ2))) -
      4 η^4 θp (861 - 5 θl (55 + 2 Φ2) + 5 ηt (20 + θl (55 + 2 Φ2))) +
```

$$
\begin{aligned}
&\quad 8\,\eta^3\,\theta p\,(96-6\,\theta l\,(19+3\,\Phi 2)+\eta t\,(179+6\,\theta l\,(19+3\,\Phi 2)))+\\
&\quad 3\,\eta^2\,(2\times(96-23\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(56+\theta p\,(38+27\,\Phi 1+51\,\Phi 2)))\big)-\\
&x^3\,(-1+\eta)^3\,\big(2\times(-1+\eta)\times\big(600\,\eta^4+75\,\eta t+72\,\eta\,(-4+3\,\eta t)-\\
&\quad 60\,\eta^3\,(-23+10\,\eta t)-8\,\eta^2\,(114+65\,\eta t)\big)\,\theta p-\\
&\quad (-1+\eta t)\,\theta l\,\big(40\,\eta^3\,\theta p\,(43+2\,\Phi 2)-48\,\eta^2\,\theta p\,(29+8\,\Phi 2)+\\
&\quad 48\times(-2+\theta p\,(2+\Phi 2))-3\,\eta\,(100+\theta p\,(42+45\,\Phi 1+53\,\Phi 2))\big)\big)+\\
&x^2\,(-1+\eta)^2\,\big(1200\,\eta^6\,\theta p-92\,\eta t\,\theta p-120\,\eta^5\,(-19+10\,\eta t)\,\theta p+\\
&\quad \eta\,(-226\,\eta t\,\theta p-(-1+\eta t)\,\theta l\,(-234+27\,\theta p\,\Phi 1+163\,\theta p\,(2+\Phi 2)))-\\
&\quad 8\,\eta^4\,\theta p\,(717-5\,\theta l\,(49+2\,\Phi 2)+5\,\eta t\,(8+\theta l\,(49+2\,\Phi 2)))+\\
&\quad 8\,\eta^3\,\theta p\,(174-3\,\theta l\,(67+14\,\Phi 2)+\eta t\,(271+3\,\theta l\,(67+14\,\Phi 2)))+3\,\eta^2\\
&\quad (2\times(144-55\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(116+\theta p\,(66+57\,\Phi 1+81\,\Phi 2)))\big)\big)+\\
&w^3\,(-1+\eta)^3\,\big(4\,x^5\,(-1+\eta)^5\,\big(3\times(-1+\eta)\times\big(28+10\,\eta^2+\eta\,(11-10\,\eta t)-11\,\eta t\big)\\
&\quad \theta p+(-1+\eta t)\,\theta l\,(10+\theta p\,(-94+3\,\Phi 1+7\,\Phi 2))\big)-\\
&\quad \eta^2\,\theta p\,\big(120\,\eta^6+\eta^4\,(360-372\,\eta t)+\eta^5\,(372-120\,\eta t)-312\,\eta t-\\
&\quad 2\,\eta\,(-24+63\,\eta t-2\,\theta l\,(66+27\,\Phi 1+31\,\Phi 2)+2\,\eta t\,\theta l\,(66+27\,\Phi 1+31\,\Phi 2))+\\
&\quad \eta^2\,(312+500\,\eta t+\theta l\,(78+81\,\Phi 1+65\,\Phi 2)-\eta t\,\theta l\,(78+81\,\Phi 1+65\,\Phi 2))+\\
&\quad \eta^3\,(-1212+\theta l\,(790-3\,\Phi 1-3\,\Phi 2)+\eta t\,(430+\theta l\,(-790+3\,\Phi 1+3\,\Phi 2)))\big)-\\
&x^2\,(-1+\eta)^2\,\big(1200\,\eta^6\,\theta p-270\,\eta t\,\theta p-120\,\eta^5\,(-19+10\,\eta t)\,\theta p-\\
&\quad 24\,\eta^4\,(-109+95\,\eta t)\,\theta p-6\,\eta\,(6\times(-4+19\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\\
&\quad (-111+2\,\theta p\,(66+27\,\Phi 1+31\,\Phi 2)))+4\,\eta^3\,(15\times(-134+55\,\eta t)\,\theta p+\\
&\quad (-1+\eta t)\,\theta l\,(43+\theta p\,(-1522+21\,\Phi 1+37\,\Phi 2)))-3\,\eta^2\,(-6\times\\
&\quad (100+63\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(-408+\theta p\,(78+81\,\Phi 1+65\,\Phi 2)))\big)+\\
&x\,(-1+\eta)\,\eta\,\big(600\,\eta^6\,\theta p+12\,\eta^4\,(127-125\,\eta t)\,\theta p-546\,\eta t\,\theta p-\\
&\quad 300\,\eta^5\,(-5+2\,\eta t)\,\theta p+2\,\eta^3\,(8\times(-312+119\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\\
&\quad (28+\theta p\,(-1742+15\,\Phi 1+23\,\Phi 2)))-6\,\eta\,((-24+89\,\eta t)\,\theta p+\\
&\quad (-1+\eta t)\,\theta l\,(-65+2\,\theta p\,(66+27\,\Phi 1+31\,\Phi 2)))+\eta^2\,(4\times(306+\\
&\quad 319\,\eta t)\,\theta p-3\times(-1+\eta t)\,\theta l\,(-174+\theta p\,(78+81\,\Phi 1+65\,\Phi 2)))\big)+\\
&x^3\,(-1+\eta)^3\,\big(4\times(-1+\eta)\times\big(-12+300\,\eta^4+\eta^2\,(1266-690\,\eta t)+\\
&\quad \eta^3\,(690-300\,\eta t)+78\,\eta t-\eta\,(306+5\,\eta t)\big)\,\theta p+(-1+\eta t)\,\theta l\\
&\quad \big(312-4\,\theta p\,(66+27\,\Phi 1+31\,\Phi 2)-\eta\,(-990+\theta p\,(78+81\,\Phi 1+65\,\Phi 2))+\\
&\quad 2\,\eta^2\,(108+\theta p\,(-2630+51\,\Phi 1+99\,\Phi 2))\big)\big)-x^4\,(-1+\eta)^4\,\big(2\times(-1+\eta)\times\\
&\quad \big(-144+300\,\eta^3+\eta^2\,(510-300\,\eta t)+13\,\eta t-6\,\eta\,(-173+85\,\eta t)\big)\,\theta p+\\
&\quad (-1+\eta t)\,\theta l\,(288+\eta\,(140+\theta p\,(-2242+57\,\Phi 1+121\,\Phi 2)))\big)\big)+\\
&w^2\,(-1+\eta)^2\,\big(4\,x^6\,(-1+\eta)^6\,\theta p\,\big(10\,\eta^3+\eta^2\,(1-10\,\eta t)-\eta\,(-17+\eta t)-\\
&\quad 4\times(7+\theta l\,(-7+\Phi 2))+\eta t\,(11+4\,\theta l\,(-7+\Phi 2))\big)-12\,x^5\,(-1+\eta)^5\\
&\quad \big((-1+\eta)\times\big(20\,\eta^3+\eta\,(89-52\,\eta t)+\eta^2\,(52-20\,\eta t)-2\times(12+\eta t)\big)\,\theta p+\\
&\quad (-1+\eta t)\,\theta l\,(10+\theta p\,(14-87\,\eta+3\,\Phi 1+7\,\Phi 2+6\,\eta\,\Phi 2))\big)+\\
&\quad \eta^2\,\theta p\,\big(40\,\eta^7+\eta^5\,(464-364\,\eta t)+\eta^6\,(364-40\,\eta t)-104\,\eta t+\\
&\quad 4\,\eta\,\theta l\,(9\,\Phi 1+13\times(2+\Phi 2))-2\,\eta\,\eta t\,(149+18\,\theta l\,\Phi 1+26\,\theta l\,(2+\Phi 2))-\\
&\quad 4\,\eta^4\,(343-\theta l\,(151+2\,\Phi 2)+\eta t\,(-35+\theta l\,(151+2\,\Phi 2)))+\\
&\quad 3\,\eta^3\,(120-\theta l\,(90+3\,\Phi 1+19\,\Phi 2)+\eta t\,(166+\theta l\,(90+3\,\Phi 1+19\,\Phi 2)))-\\
&\quad 3\,\eta^2\,(-48-\theta l\,(86+27\,\Phi 1+35\,\Phi 2)+\eta t\,(-56+\theta l\,(86+27\,\Phi 1+35\,\Phi 2)))\big)+\\
&\quad 3\,x^2\,(-1+\eta)^2\,\big(200\,\eta^7\,\theta p-30\,\eta t\,\theta p-20\,\eta^6\,(-61+10\,\eta t)\,\theta p-\\
&\quad 20\,\eta^5\,(-59+61\,\eta t)\,\theta p-4\,\eta^4\,(998-510\,\theta l+5\,\eta t\,(-43+102\,\theta l))\,\theta p-
\end{aligned}
$$

```
                2 η (126 ηt θp + (-1 + ηt) θl (-37 + 18 θp Φ1 + 26 θp (2 + Φ2))) - 3 η^2
                 (2 × (-48 + 23 ηt) θp + (-1 + ηt) θl (-136 + θp (134 + 27 Φ1 + 51 Φ2))) +
                4 η^3 ((276 + 245 ηt) θp + (-1 + ηt) θl (43 + θp (200 + 21 Φ1 + 61 Φ2)))) -
            x (-1 + η) η (240 η^7 θp + 12 η^5 (169 - 152 ηt) θp - 182 ηt θp -
                48 η^6 (-38 + 5 ηt) θp - 2 η (395 ηt θp + (-1 + ηt) θl
                     (-65 + 54 θp Φ1 + 78 θp (2 + Φ2))) - 12 η^4 θp (533 - θl (251 + 2 Φ2) +
                   ηt (-82 + θl (251 + 2 Φ2))) + 6 η^3 (2 × (144 + 161 ηt) θp +
                   (-1 + ηt) θl (28 + θp (214 + 15 Φ1 + 55 Φ2))) + 3 η^2
                 (8 × (24 + 5 ηt) θp - (-1 + ηt) θl (-174 + θp (306 + 81 Φ1 + 121 Φ2)))) -
            x^3 (-1 + η)^3 (4 × (-1 + η) × (200 η^5 + η^3 (1910 - 1120 ηt) + 69 ηt -
                   40 η^4 (-28 + 5 ηt) + 9 η (-16 + 25 ηt) - 12 η^2 (78 + 25 ηt)) θp +
                (-1 + ηt) θl (104 + 40 η^3 θp (-161 + 2 Φ2) - 4 θp (26 + 9 Φ1 + 13 Φ2) -
                   3 η (-330 + θp (230 + 27 Φ1 + 83 Φ2)) +
                   6 η^2 (108 + θp (366 + 51 Φ1 + 131 Φ2)))) + 3 x^4 (-1 + η)^4
              (2 × (-1 + η) × (-24 + 100 η^4 + η^2 (670 - 410 ηt) + η^3 (410 - 100 ηt) +
                   43 ηt - 12 η (23 + 5 ηt)) θp + (-1 + ηt) θl (96 - 16 θp (3 + Φ2) +
                   20 η^2 θp (-61 + 2 Φ2) + η (140 + θp (326 + 57 Φ1 + 137 Φ2))))))) /
  (96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (w + x + η - w η - x η)^3
    (-1 +
      ηt) θp)
```

Perturbative corrections

The following notation has been used in the following definitions :

$\delta\Gamma$ ($\delta\Gamma$)

$\delta\lambda^{\perp}$ ($\delta\lambda$p)

$\delta\lambda^{\shortparallel}$ ($\delta\lambda$l)

$\delta\tilde{\Gamma}$ ($\delta\Gamma$t)

$\delta\tilde{\lambda}^{\perp}$ ($\delta\lambda$pt)

$\delta\tilde{\lambda}^{\shortparallel}$ ($\delta\lambda$lt)

$\delta\Omega$ ($\delta\Omega$)

δm (δm)

δg_{ψ} ($\delta g\psi$)

δg_{s} (δgs)

δg_{s1} (δgs1)

δg_{s2} (δgs2)

$\delta\gamma_{\psi}$ ($\delta\gamma\psi$)

$\delta\gamma_{s}$ ($\delta\gamma$s)

$\delta\gamma_{s1}$ ($\delta\gamma$s1)

$\delta\gamma_{s2}$ ($\delta\gamma$s2)

δJ (δJ)

$\delta\kappa$ ($\delta\kappa$)

In[∘]:= $\delta\Gamma = \frac{cv^2}{4} -$

$$
\begin{aligned}
&\Big(f\,(-1+\eta)\times\Big(2\,w^5\,(-1+\eta)^5\,\Big(2\,x^3\,(-1+\eta)^3\,\Big((-1+\eta)\times\big(-8+10\,\eta^2+\eta\,(11-10\,\eta t)-11\,\eta t\big)\\
&\qquad \theta p+(-1+\eta t)\,\theta l\,(8+9\,\theta p\,(6+\Phi 1+\Phi 2))\Big)-\\
&\qquad 3\,x^2\,(-1+\eta)^2\,\Big(20\,\eta^4\,\theta p+\eta^3\,(2-20\,\eta t)\,\theta p-3\,\eta t\,\theta p-2\,\eta^2\,(19+\eta t)\,\theta p+\\
&\qquad \eta\,(16+25\,\eta t)\,\theta p+\eta\,(-1+\eta t)\,\theta l\,(13+18\,\theta p\,(6+\Phi 1+\Phi 2))\Big)+\\
&\qquad x\,(-1+\eta)\,\eta\,\Big(60\,\eta^4\,\theta p+\eta^3\,(6-60\,\eta t)\,\theta p-19\,\eta t\,\theta p-6\,\eta^2\,(19+\eta t)\,\theta p+\\
&\qquad \eta\,(48+85\,\eta t)\,\theta p+\eta\,(-1+\eta t)\,\theta l\,(29+54\,\theta p\,(6+\Phi 1+\Phi 2))\Big)-\\
&\qquad 2\,\eta^2\,\theta p\,\Big(10\,\eta^4+\eta^3\,(1-10\,\eta t)-8\,\eta t-\eta^2\,(19+\eta t)+\\
&\qquad \eta\,(8-9\,\theta l\,(6+\Phi 1+\Phi 2)+\eta t\,(19+9\,\theta l\,(6+\Phi 1+\Phi 2)))\Big)\Big)+\\
&\quad 3\,w^4\,(-1+\eta)^4\,\Big(4\,x^4\,(-1+\eta)^4\,\Big((-1+\eta)\times\big(-8+10\,\eta^2+\eta\,(11-10\,\eta t)-11\,\eta t\big)\,\theta p+\\
&\qquad (-1+\eta t)\,\theta l\,(2+9\,\theta p\,(6+\Phi 1+\Phi 2))\Big)-x^3\,(-1+\eta)^3\\
&\qquad \Big(4\times(-1+\eta)\times\big(-20+40\,\eta^3+\eta^2\,(54-40\,\eta t)+\eta t-3\,\eta\,(7+18\,\eta t)\big)\,\theta p+\\
&\qquad (-1+\eta t)\,\theta l\,(32+38\,\eta+36\,\theta p\,(6+\Phi 1+\Phi 2)+135\,\eta\,\theta p\,(6+\Phi 1+\Phi 2))\Big)+\\
&\qquad \eta^2\,\theta p\,\Big(40\,\eta^5+\eta^4\,(44-40\,\eta t)-32\,\eta t-4\,\eta^3\,(18+11\,\eta t)+\\
&\qquad \eta^2\,(-92-27\,\theta l\,(6+\Phi 1+\Phi 2)+3\,\eta t\,(34+9\,\theta l\,(6+\Phi 1+\Phi 2)))+\\
&\qquad 2\,\eta\,(40-18\,\theta l\,(6+\Phi 1+\Phi 2)+\eta t\,(7+18\,\theta l\,(6+\Phi 1+\Phi 2)))\Big)-\\
&\qquad x\,(-1+\eta)\,\eta\,\Big(160\,\eta^5\,\theta p-38\,\eta t\,\theta p-8\,\eta^4\,(-17+20\,\eta t)\,\theta p-4\,\eta^3\,(73+34\,\eta t)\,\theta p+\\
&\qquad 2\,\eta\,(5\times(24+\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(29+54\,\theta p\,(6+\Phi 1+\Phi 2)))+\\
&\qquad \eta^2\,(4\times(-61+81\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(34+117\,\theta p\,(6+\Phi 1+\Phi 2)))\Big)+\\
&\qquad x^2\,(-1+\eta)^2\,\Big(240\,\eta^5\,\theta p-18\,\eta t\,\theta p+4\,\eta\,(60+\eta t)\,\theta p-48\,\eta^4\,(-3+5\,\eta t)\,\theta p-\\
&\qquad 12\,\eta^3\,(37+12\,\eta t)\,\theta p+6\,\eta\,(-1+\eta t)\,\theta l\,(13+18\,\theta p\,(6+\Phi 1+\Phi 2))+\\
&\qquad \eta^2\,(2\times(-90+199\,\eta t)\,\theta p+(-1+\eta t)\,\theta l\,(64+189\,\theta p\,(6+\Phi 1+\Phi 2)))\Big)\Big)+\\
&\quad (x+\eta-x\,\eta)^2\,\Big(4\,x^4\,(-1+\eta)^4\,\theta p\,\Big(12+30\,\eta^3-48\,\theta l-2\,\eta^2\,(24-5\,\theta l+5\,\eta t\,(2+\theta l))-\\
&\qquad 8\,\theta l\,\Phi 2+\eta t\,(-9+8\,\theta l\,(6+\Phi 2))+\\
&\qquad \eta\,(6-9\,\theta l+2\,\theta l\,\Phi 2+\eta t\,(29+9\,\theta l-2\,\theta l\,\Phi 2))\Big)-\\
&\qquad 8\,x^3\,(-1+\eta)^3\,\Big(2\times(-1+\eta)\,\eta\,\big(-12+30\,\eta^2+9\,\eta t-2\,\eta\,(9+10\,\eta t)\big)\,\theta p-(-1+\eta t)\\
&\qquad \theta l\,\Big(-5+2\,\theta p\,\Big(-2+10\,\eta^3-3\,\Phi 1-\Phi 2-8\,\eta\,(6+\Phi 2)+\eta^2\,(-9+2\,\Phi 2)\Big)\Big)\Big)+\\
&\qquad \eta^2\,\theta p\,\Big(120\,\eta^5-42\,\eta t-8\,\eta^4\,(24-5\,\theta l+5\,\eta t\,(2+\theta l))+\\
&\qquad 3\,\eta\,(14\,\eta t-13\,\theta l\,\Phi 1-5\,\theta l\,(2+\Phi 2)+\eta t\,\theta l\,(13\,\Phi 1+5\times(2+\Phi 2)))+\\
&\qquad 4\,\eta^2\,(12-8\,\theta l\,(6+\Phi 2)+\eta t\,(-9+8\,\theta l\,(6+\Phi 2)))-\\
&\qquad 4\,\eta^3\,(-6+\theta l\,(9-2\,\Phi 2)+\eta t\,(-29+\theta l\,(-9+2\,\Phi 2)))\Big)+\\
&\qquad x^2\,(-1+\eta)^2\,\Big(720\,\eta^5\,\theta p-50\,\eta t\,\theta p-48\,\eta^4\,(24-5\,\theta l+5\,\eta t\,(2+\theta l))\,\theta p+\\
&\qquad \eta\,(50\,\eta t\,\theta p+(-1+\eta t)\,\theta l\,(60+141\,\theta p\,\Phi 1+53\,\theta p\,(2+\Phi 2)))+\\
&\qquad 24\,\eta^2\,\theta p\,(12-8\,\theta l\,(6+\Phi 2)+\eta t\,(-9+8\,\theta l\,(6+\Phi 2)))-\\
&\qquad 24\,\eta^3\,\theta p\,(-6+\theta l\,(9-2\,\Phi 2)+\eta t\,(-29+\theta l\,(-9+2\,\Phi 2)))\Big)-\\
&\qquad 4\,x\,(-1+\eta)\,\eta\,\Big(120\,\eta^5\,\theta p-14\,\eta t\,\theta p-8\,\eta^4\,(24-5\,\theta l+5\,\eta t\,(2+\theta l))\,\theta p+\\
&\qquad \eta\,(14\,\eta t\,\theta p+(-1+\eta t)\,\theta l\,(14+33\,\theta p\,\Phi 1+13\,\theta p\,(2+\Phi 2)))+\\
&\qquad 4\,\eta^2\,\theta p\,(12-8\,\theta l\,(6+\Phi 2)+\eta t\,(-9+8\,\theta l\,(6+\Phi 2)))-\\
&\qquad 4\,\eta^3\,\theta p\,(-6+\theta l\,(9-2\,\Phi 2)+\eta t\,(-29+\theta l\,(-9+2\,\Phi 2)))\Big)\Big)+\\
&\quad w\,(x\,(-1+\eta)-\eta)\,(-1+\eta)\times\Big(-4\,x^5\,(-1+\eta)^5\,\theta p\,\Big(30\,\eta^3+\eta^2\,(3-30\,\eta t)+\\
&\qquad 2\times(30+\eta t-6\,\theta l\,(11+\Phi 2)+6\,\eta t\,\theta l\,(11+\Phi 2))+\\
&\qquad \eta\,(-93+\theta l\,(31+2\,\Phi 2)+\eta t\,(28-\theta l\,(31+2\,\Phi 2)))\Big)+4\,x^4\,(-1+\eta)^4\\
&\qquad \Big((-1+\eta)\times\big(150\,\eta^3+\eta^2\,(255-150\,\eta t)+9\times(-4+3\,\eta t)-2\,\eta\,(177+35\,\eta t)\big)\,\theta p-\\
&\qquad (-1+\eta t)\,\theta l\,\Big(-30+\theta p\,\Big(5\,\eta^2\,(37+2\,\Phi 2)-12\times(14+3\,\Phi 1+3\,\Phi 2)-
\end{aligned}
$$

```
                3 η (229 + 18 Φ2)))) + η^2 θp (120 η^6 + η^5 (372 - 120 ηt) - 62 ηt +
        η (-64 ηt - 81 θl Φ1 - 41 θl (2 + Φ2) + ηt θl (81 Φ1 + 41 × (2 + Φ2))) +
        4 η^3 (78 - 3 θl (53 + 2 Φ2) + ηt (89 + 3 θl (53 + 2 Φ2))) -
        4 η^4 (237 - θl (61 + 2 Φ2) + ηt (32 + θl (61 + 2 Φ2))) +
        3 η^2 (48 - θl (222 + 39 Φ1 + 47 Φ2) + ηt (6 + θl (222 + 39 Φ1 + 47 Φ2)))) +
    x^2 (-1 + η)^2 (1200 η^6 θp - 20 ηt θp - 120 η^5 (-19 + 10 ηt) θp +
        η (-298 ηt θp + (-1 + ηt) θl (90 + 297 θp Φ1 + 161 θp (2 + Φ2))) -
        8 η^4 θp (897 - 5 θl (49 + 2 Φ2) + 5 ηt (8 + θl (49 + 2 Φ2))) +
        8 η^3 θp (354 - 3 θl (247 + 14 Φ2) + ηt (271 + θl (741 + 42 Φ2))) + η^2
          (6 × (144 - 55 ηt) θp + 3 × (-1 + ηt) θl (116 + 3 θp (454 + 91 Φ1 + 99 Φ2)))) -
    x (-1 + η) η (600 η^6 θp - 46 ηt θp - 300 η^5 (-5 + 2 ηt) θp +
        2 η (-124 ηt θp + (-1 + ηt) θl (51 + 135 θp Φ1 + 71 θp (2 + Φ2))) -
        4 η^4 θp (1041 - 5 θl (55 + 2 Φ2) + 5 ηt (20 + θl (55 + 2 Φ2))) +
        8 η^3 θp (186 - 6 θl (64 + 3 Φ2) + ηt (179 + 6 θl (64 + 3 Φ2))) +
        3 η^2 (2 × (96 - 23 ηt) θp + (-1 + ηt) θl (56 + θp (902 + 171 Φ1 + 195 Φ2)))) -
    x^3 (-1 + η)^3 (2 × (-1 + η) × (600 η^4 + 75 ηt + 72 η (-4 + 3 ηt) -
            60 η^3 (-23 + 10 ηt) - 8 η^2 (204 + 65 ηt)) θp -
        (-1 + ηt) θl (40 η^3 θp (43 + 2 Φ2) - 48 η^2 θp (119 + 8 Φ2) - 12 ×
              (2 + 9 θp Φ1 + 5 θp (2 + Φ2)) - 3 η (100 + θp (906 + 189 Φ1 + 197 Φ2))))) +
w^2 (-1 + η)^2 (4 x^6 (-1 + η)^6 θp (8 + 10 η^3 + η^2 (1 - 10 ηt) - η (19 + ηt) -
        44 θl - 4 θl Φ2 + ηt (11 + 4 θl (11 + Φ2))) - 12 x^5 (-1 + η)^5
      ((-1 + η) × (20 η^3 + η (17 - 52 ηt) + η^2 (52 - 20 ηt) - 2 × (30 + ηt)) θp +
        (-1 + ηt) θl (10 + 4 θp (35 + 3 Φ1 + 4 Φ2) + η θp (57 + 6 Φ2))) + 3 x^4 (-1 + η)^4
      (2 × (-1 + η) × (-24 + 100 η^4 + η^2 (310 - 410 ηt) + η^3 (410 - 100 ηt) + 43 ηt -
              12 η (53 + 5 ηt)) θp + (-1 + ηt) θl (24 + 140 η + 20 η^2 θp (11 + 2 Φ2) +
              4 θp (78 + 27 Φ1 + 23 Φ2) + η θp (2846 + 237 Φ1 + 317 Φ2))) +
    η^2 θp (40 η^7 + η^6 (364 - 40 ηt) - 32 ηt - 4 η^5 (-80 + 91 ηt) -
        4 η^4 (415 - θl (79 + 2 Φ2) + ηt (-35 + θl (79 + 2 Φ2))) +
        2 η (-2 θl (9 Φ1 + 5 × (2 + Φ2)) + ηt (-77 + 2 θl (10 + 9 Φ1 + 5 Φ2))) +
        3 η^3 (264 - θl (594 + 39 Φ1 + 55 Φ2) + ηt (166 + θl (594 + 39 Φ1 + 55 Φ2))) +
        3 η^2 (48 - θl (274 + 81 Φ1 + 73 Φ2) + ηt (-16 + θl (274 + 81 Φ1 + 73 Φ2)))) +
    3 x^2 (-1 + η)^2 (200 η^7 θp - 6 ηt θp - 20 η^6 (-61 + 10 ηt) θp -
        20 η^5 (-23 + 61 ηt) θp + 4 η^4 (-1178 + 215 ηt + 150 θl - 150 ηt θl) θp +
        η (-60 ηt θp + 2 × (-1 + ηt) θl (13 + 2 θp (10 + 9 Φ1 + 5 Φ2))) +
        4 η^3 ((636 + 245 ηt) θp + (-1 + ηt) θl (43 + θp (1460 + 111 Φ1 + 151 Φ2))) +
        3 η^2 (2 × (48 - 59 ηt) θp + (-1 + ηt) θl (64 + θp (586 + 189 Φ1 + 165 Φ2)))) -
    x (-1 + η) η (240 η^7 θp - 38 ηt θp - 48 η^6 (-38 + 5 ηt) θp - 12 η^5 (-97 + 152 ηt)
          θp - 12 η^4 θp (641 - 107 θl - 2 θl Φ2 + ηt (-82 + 107 θl + 2 θl Φ2)) +
        2 η (-143 ηt θp + (-1 + ηt) θl (29 + 6 θp (10 + 9 Φ1 + 5 Φ2))) + 6 η^3 (2 × (324 +
              161 ηt) θp + (-1 + ηt) θl (28 + θp (1474 + 105 Φ1 + 145 Φ2))) + 3 η^2
          (16 × (12 - 11 ηt) θp + (-1 + ηt) θl (102 + θp (1134 + 351 Φ1 + 311 Φ2)))) -
    x^3 (-1 + η)^3 (4 × (-1 + η) × (200 η^5 + 15 ηt - 40 η^4 (-28 + 5 ηt) -
            70 η^3 (-17 + 16 ηt) + 9 η (-16 + 25 ηt) - 12 η^2 (168 + 25 ηt)) θp +
        (-1 + ηt) θl (40 η^3 θp (-17 + 2 Φ2) + 4 × (8 + 9 θp Φ1 + 5 θp (2 + Φ2)) +
```

$$
\begin{aligned}
&\quad 6\,\eta^2\,(108 + \theta p\,(2886 + 231\,\Phi 1 + 311\,\Phi 2)) + \\
&\quad 3\,\eta\,(114 + \theta p\,(1210 + 405\,\Phi 1 + 349\,\Phi 2)))\big)\big) + \\
&w^3\,(-1+\eta)^3\,\big(4\,x^5\,(-1+\eta)^5\,\big(3\times(-1+\eta)\times\big(-8 + 10\,\eta^2 + \eta\,(11 - 10\,\eta t) - 11\,\eta t\big)\,\theta p + \\
&\quad 2\times(-1+\eta t)\,\theta l\,(5 + \theta p\,(70 + 6\,\Phi 1 + 8\,\Phi 2))\big) - x^4\,(-1+\eta)^4\,\big(2\times(-1+\eta)\times \\
&\quad \big(-360 + 300\,\eta^3 + \eta^2\,(510 - 300\,\eta t) + 13\,\eta t - 6\,\eta\,(7 + 85\,\eta t)\big)\,\theta p + (-1+\eta t) \\
&\quad \theta l\,(72 + 140\,\eta + 324\,\theta p\,(6 + \Phi 1 + \Phi 2) + \eta\,\theta p\,(2438 + 237\,\Phi 1 + 301\,\Phi 2))\big) + \\
&\eta^2\,\theta p\,\big(-120\,\eta^6 + 96\,\eta t + 12\,\eta^5\,(-31 + 10\,\eta t) + 12\,\eta^4\,(6 + 31\,\eta t) - \\
&\quad 2\,\eta\,(24 - 2\,\theta l\,(78 + 27\,\Phi 1 + 23\,\Phi 2) + \eta t\,(-63 + 2\,\theta l\,(78 + 27\,\Phi 1 + 23\,\Phi 2))) + \\
&\quad \eta^3\,(1212 + \theta l\,(146 + 39\,\Phi 1 + 39\,\Phi 2) - \eta t\,(430 + \theta l\,(146 + 39\,\Phi 1 + 39\,\Phi 2))) - \\
&\quad \eta^2\,(744 - \theta l\,(1866 + 243\,\Phi 1 + 259\,\Phi 2) + \\
&\quad \eta t\,(284 + \theta l\,(1866 + 243\,\Phi 1 + 259\,\Phi 2)))\big) + x\,(-1+\eta)\,\eta \\
&\quad \big(600\,\eta^6\,\theta p - 114\,\eta t\,\theta p - 300\,\eta^5\,(-5 + 2\,\eta t)\,\theta p - 12\,\eta^4\,(53 + 125\,\eta t)\,\theta p + \\
&\quad 6\,\eta\,((24 - 53\,\eta t)\,\theta p + (-1+\eta t)\,\theta l\,(29 + 2\,\theta p\,(78 + 27\,\Phi 1 + 23\,\Phi 2))) + 2\,\eta^3 \\
&\quad (8\times(-285 + 119\,\eta t)\,\theta p + (-1+\eta t)\,\theta l\,(28 + \theta p\,(598 + 105\,\Phi 1 + 113\,\Phi 2))) + \\
&\quad \eta^2\,(4\times(738 + 157\,\eta t)\,\theta p + 3\times(-1+\eta t)\,\theta l \\
&\quad (102 + \theta p\,(2514 + 351\,\Phi 1 + 367\,\Phi 2)))\big) - x^2\,(-1+\eta)^2 \\
&\quad \big(1200\,\eta^6\,\theta p - 54\,\eta t\,\theta p - 120\,\eta^5\,(-19 + 10\,\eta t)\,\theta p - 24\,\eta^4\,(71 + 95\,\eta t)\,\theta p + \\
&\quad 6\,\eta\,(6\times(4 - 7\,\eta t)\,\theta p + (-1+\eta t)\,\theta l\,(39 + 2\,\theta p\,(78 + 27\,\Phi 1 + 23\,\Phi 2))) + \\
&\quad 4\,\eta^3\,(3\times(-526 + 275\,\eta t)\,\theta p + \\
&\quad (-1+\eta t)\,\theta l\,(43 + \theta p\,(818 + 111\,\Phi 1 + 127\,\Phi 2))) + 3\,\eta^2 \\
&\quad (6\times(244 + 27\,\eta t)\,\theta p + (-1+\eta t)\,\theta l\,(192 + \theta p\,(3810 + 567\,\Phi 1 + 583\,\Phi 2)))\big) + \\
&x^3\,(-1+\eta)^3\,\big(4\times(-1+\eta)\times\big(-12 + 300\,\eta^4 + \eta^2\,(186 - 690\,\eta t) + \\
&\quad \eta^3\,(690 - 300\,\eta t) + 24\,\eta t - \eta\,(738 + 5\,\eta t)\big)\,\theta p + (-1+\eta t)\,\theta l \\
&\quad \big(96 + 4\,\theta p\,(78 + 27\,\Phi 1 + 23\,\Phi 2) + \eta^2\,(216 + \theta p\,(4100 + 462\,\Phi 1 + 558\,\Phi 2)) + \\
&\quad \eta\,(342 + \theta p\,(7698 + 1215\,\Phi 1 + 1231\,\Phi 2))\big)\big)\big)\big)\big) \Big/ \\
&\big(96\,(-1 + w\,(-1+\eta))^3\,(x\,(-1+\eta) - \eta)^3\,(w + x + \eta - w\,\eta - x\,\eta)^3 \\
&\quad (-1 + \\
&\quad \eta t)\,\theta p\big)
\end{aligned}
$$

$$
\begin{aligned}
&\delta\lambda p = \\
&\Big(c\sigma^2 (-1+\eta) \times \Big(-4 x - 5 x^2 - 4 \eta - 6 x \eta + 10 x^2 \eta - 5 \eta^2 + 10 x \eta^2 - 5 x^2 \eta^2 - 8 x \mu 1 - 8 x^2 \mu 1 - 8 \eta \\
&\quad \mu 1 - 8 x \eta \mu 1 + 15 x^2 \eta \mu 1 - 8 \eta^2 \mu 1 + 14 x \eta^2 \mu 1 - 6 x^2 \eta^2 \mu 1 - \eta^3 \mu 1 + 2 x \eta^3 \mu 1 - \\
&\quad x^2 \eta^3 \mu 1 - 4 x \mu 1^2 - 3 x^2 \mu 1^2 - 4 \eta \mu 1^2 - 2 x \eta \mu 1^2 + 5 x^2 \eta \mu 1^2 - 3 \eta^2 \mu 1^2 + \\
&\quad 4 x \eta^2 \mu 1^2 - x^2 \eta^2 \mu 1^2 - \eta^3 \mu 1^2 + 2 x \eta^3 \mu 1^2 - x^2 \eta^3 \mu 1^2 - 10 x \mu 2 - 6 x^2 \mu 2 - \\
&\quad 11 \eta \mu 2 - 2 x \eta \mu 2 + 12 x^2 \eta \mu 2 - 6 \eta^2 \mu 2 + 12 x \eta^2 \mu 2 - 6 x^2 \eta^2 \mu 2 - 10 x \mu 1 \mu 2 - \\
&\quad 12 x^2 \mu 1 \mu 2 - 11 \eta \mu 1 \mu 2 - 14 x \eta \mu 1 \mu 2 + 18 x^2 \eta \mu 1 \mu 2 - 12 \eta^2 \mu 1 \mu 2 + 12 x \eta^2 \mu 1 \mu 2 - \\
&\quad 6 \eta^3 \mu 1 \mu 2 + 12 x \eta^3 \mu 1 \mu 2 - 6 x^2 \eta^3 \mu 1 \mu 2 - 9 x \mu 2^2 - 9 \eta \mu 2^2 + 9 x \eta \mu 2^2 + \\
&\quad 9 w^3 (-1+\eta)^3 \left(\mu 1^2 + (1+\mu 2)^2 + \mu 1 (2+4 \mu 2)\right) + w^2 (-1+\eta)^2 \Big(-13 - 24 \mu 1 - 11 \mu 1^2 - \\
&\qquad 30 \mu 2 - 36 \mu 1 \mu 2 - 18 \mu 2^2 - \eta \left(14 + 29 \mu 1 + 15 \mu 1^2 + 23 \mu 2 + 65 \mu 1 \mu 2 + 9 \mu 2^2\right) + \\
&\qquad x (-1+\eta) \times \left(14 + 14 \mu 1^2 + 22 \mu 2 + 9 \mu 2^2 + \mu 1 (28 + 58 \mu 2)\right)\Big) + \\
&\quad w (-1+\eta) \Big((2 + 2 \mu 1 + 3 \mu 2)^2 + \eta^2 \left(5 + 7 \mu 1^2 + 6 \mu 2 + 12 \mu 1 (1 + 3 \mu 2)\right) + \\
&\qquad x^2 (-1+\eta)^2 \left(5 + 5 \mu 1^2 + 6 \mu 2 + 2 \mu 1 (5 + 12 \mu 2)\right) + \\
&\qquad 2 \eta \left(9 + 7 \mu 1^2 + 17 \mu 2 + 9 \mu 2^2 + \mu 1 (16 + 23 \mu 2)\right) - 2 x (-1+\eta) \times \Big(9 + 7 \mu 1^2 + \\
&\qquad\quad 16 \mu 2 + 9 \mu 2^2 + 2 \mu 1 (8 + 11 \mu 2) + \eta \left(5 + 6 \mu 1^2 + 6 \mu 2 + \mu 1 (11 + 30 \mu 2)\right)\Big)\Big)\Big) + \\
&\quad f (-1 + w (-1+\eta))^2 (w + x + \eta - w \eta - x \eta)^2 \theta l (2 + \Phi 2)\Big) \Big/ \Big(12 x \\
&\quad (-1 + w (-1+\eta))^2 \\
&\quad (w (-1+\eta) + x (-1+\eta) - \eta)^2\Big)
\end{aligned}
$$

$$
\begin{aligned}
&\delta\lambda l = \\
&\Big(c\sigma^2 (-1+\eta) \times \Big(-5 x - 4 x^2 - 5 \eta - 3 x \eta + 8 x^2 \eta - 4 \eta^2 + 8 x \eta^2 - 4 x^2 \eta^2 - 4 x \mu 1 + 2 x^2 \mu 1 - 4 \eta \\
&\quad \mu 1 + 8 x \eta \mu 1 - 3 x^2 \eta \mu 1 + 2 \eta^2 \mu 1 - 2 x \eta^2 \mu 1 + \eta^3 \mu 1 - 2 x \eta^3 \mu 1 + x^2 \eta^3 \mu 1 + \\
&\quad x \mu 1^2 - 3 x^2 \mu 1^2 + \eta \mu 1^2 - 7 x \eta \mu 1^2 + 7 x^2 \eta \mu 1^2 - 3 \eta^2 \mu 1^2 + 8 x \eta^2 \mu 1^2 - \\
&\quad 5 x^2 \eta^2 \mu 1^2 + \eta^3 \mu 1^2 - 2 x \eta^3 \mu 1^2 + x^2 \eta^3 \mu 1^2 - 2 x \mu 2 - \eta \mu 2 + 2 x \eta \mu 2 - \\
&\quad 8 x \mu 1 \mu 2 - 13 \eta \mu 1 \mu 2 + 8 x \eta \mu 1 \mu 2 + 9 w^3 (-1+\eta)^3 (1 + 2 \mu 1 \mu 2) + \\
&\quad w (-1+\eta) \times \Big(5 + x^2 (-1+\eta)^2 (-2+\mu 1)^2 + 4 \mu 1 - \mu 1^2 - \eta^2 \left(-4 + 6 \mu 1 + \mu 1^2\right) + \\
&\qquad 18 \mu 1 \mu 2 + 2 x (-1+\eta) \times \left(-9 - 2 \mu 1 - 2 \mu 1^2 + \eta (-4 + 5 \mu 1) - 2 \mu 2 - 8 \mu 1 \mu 2\right) + \\
&\qquad 2 \eta \left(9 + 2 \mu 1 + 2 \mu 1^2 + \mu 2 + 13 \mu 1 \mu 2\right)\Big) + w^2 (-1+\eta)^2 \Big(-14 - 6 \mu 1 - \mu 1^2 - 36 \mu 1 \mu 2 - \\
&\qquad \eta (13 - 5 \mu 1 + \mu 2 + 13 \mu 1 \mu 2) + x (-1+\eta) \times \left(13 + \mu 1^2 + 2 \mu 2 + \mu 1 (-4 + 8 \mu 2)\right)\Big)\Big) - \\
&\quad f (-1 + w (-1+\eta))^2 (w + x + \eta - w \eta - x \eta)^2 \theta l (-4 + \Phi 2)\Big) \Big/ \\
&\Big(12 (-1 + w (-1+\eta))^2 (w (-1+\eta) + x (-1+\eta) - \eta)^2\Big)
\end{aligned}
$$

$$
\begin{aligned}
&\delta\Gamma t = \Big(3 f (-1+\eta)^2 \Big(2 x^2 (-1+\eta)^2 \theta p + \left(2 \eta^2 + \eta t - w (-1+\eta) \times (2 \eta + \eta t)\right) \theta p + \\
&\quad x \left((-1 + w (-1+\eta)) \times (-1 + \eta t) \theta l + 2 (w (-1+\eta) - 2 \eta) (-1+\eta) \theta p\right)\Big)\Big) \Big/ \\
&\Big(4 \times (-1 + w (-1+\eta)) (x (-1+\eta) - \eta) (w (-1+\eta) + x (-1+\eta) - \eta) (-1 + \eta t) \theta p\Big)
\end{aligned}
$$

$$\delta\lambda pt = \frac{1}{24\, x\, \theta l} \Big(\Big(2\, c\sigma^2\, (-1+\eta)^2 \Big(x^2\, (-1+\eta)^2\, \theta p\, \big(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\, (5 + 6\,\mu 2)\big) + x \Big((w\,(-1+\eta) - 2\,\eta)\,(-1+\eta)\,\theta p\, \big(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5+6\,\mu 2)\big) + (-1 + w\,(-1+\eta)) \times (-1+\eta t)\,\theta l\, \big(4 + 4\,\mu 1^2 + 6\,\mu 2 + 9\,\mu 2^2 + \mu 1\,(8 + 6\,\mu 2)\big)\Big) + \theta p\, \Big(\eta^2 \big(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5+6\,\mu 2)\big) + \eta t\, \big(4 + 4\,\mu 1^2 + 6\,\mu 2 + 9\,\mu 2^2 + \mu 1\,(8+6\,\mu 2)\big) - w\,(-1+\eta)\, \big(\eta\, \big(5 + 5\,\mu 1^2 + 12\,\mu 2 + 18\,\mu 2^2 + 2\,\mu 1\,(5+6\,\mu 2)\big) + \eta t\, \big(4 + 4\,\mu 1^2 + 6\,\mu 2 + 9\,\mu 2^2 + \mu 1\,(8+6\,\mu 2)\big)\big)\Big)\Big)\Big)\Big) \Big/ \big((-1 + w\,(-1+\eta))\,(x\,(-1+\eta) - \eta)\,(w\,(-1+\eta) + x\,(-1+\eta) - \eta)\,(-1+\eta t)\big) + f\, \theta l^2\, \theta p\, (2 + \Phi 2)^2\Big)$$

$$\delta\lambda lt = \frac{1}{24} \times \Big(\Big(2\, c\sigma^2\, (-1+\eta)^2 \Big(x\,(w\,(-1+\eta) - 2\,\eta)\,(-1+\eta)\,\theta p\, \big(4 + 2\,\mu 1 + 7\,\mu 1^2\big) + x^2\, (-1+\eta)^2\, \theta p\, \big(4 + 2\,\mu 1 + 7\,\mu 1^2\big) + \eta^2\, \theta p\, \big(4 + 2\,\mu 1 + 7\,\mu 1^2\big) + x\,(-1 + w\,(-1+\eta)) \times (-1+\eta t)\,\theta l\, \big(5 - 2\,\mu 1 + 11\,\mu 1^2\big) + \eta t\, \theta p\, \big(5 - 2\,\mu 1 + 11\,\mu 1^2\big) - w\,(-1+\eta)\,\theta p\, \big(\eta\, \big(4 + 2\,\mu 1 + 7\,\mu 1^2\big) + \eta t\, \big(5 - 2\,\mu 1 + 11\,\mu 1^2\big)\big)\Big)\Big) \Big/ \big((-1 + w\,(-1+\eta))\,(x\,(-1+\eta) - \eta)\,(w\,(-1+\eta) + x\,(-1+\eta) - \eta)\,(-1+\eta t)\,\theta p\big) + f\, \theta l^2\, \big(8 - 4\,\Phi 2 + 5\,\Phi 2^2\big)\Big)$$

$$\delta\Omega = \Big(3\, f\, w\, \Big(-2\, x\, (-1 + w\,(-1+\eta))^2\, \theta l + 6\, x\, (-1 + w\,(-1+\eta))^2\, \eta\, \theta l - 6\, x\, (-1 + w\,(-1+\eta))^2\, \eta^2\, \theta l + 2\, x\, (-1 + w\,(-1+\eta))^2\, \eta^3\, \theta l + 2\, x\, (-1 + w\,(-1+\eta))^2\, \eta t\, \theta l - 6\, x\, (-1 + w\,(-1+\eta))^2\, \eta\, \eta t\, \theta l + 6\, x\, (-1 + w\,(-1+\eta))^2\, \eta^2\, \eta t\, \theta l - 2\, x\, (-1 + w\,(-1+\eta))^2\, \eta^3\, \eta t\, \theta l - 4\, (x + \eta - x\,\eta)\, (w + x + \eta - w\,\eta - x\,\eta)^2\, \theta p + 12\,\eta\, (x + \eta - x\,\eta)\, (w + x + \eta - w\,\eta - x\,\eta)^2\, \theta p + 4\,\eta^3\, (x + \eta - x\,\eta)\, (w + x + \eta - w\,\eta - x\,\eta)^2\, \theta p - 12\, (x + \eta - x\,\eta)\, (\eta - (-1 + w + x) \times (-1+\eta)\,\eta)^2\, \theta p - 2\, (-1 + w\,(-1+\eta))^2\, \eta t\, \theta p + 6\, (-1 + w\,(-1+\eta))^2\, \eta\, \eta t\, \theta p - 6\, (-1 + w\,(-1+\eta))^2\, \eta^2\, \eta t\, \theta p + 2\, (-1 + w\,(-1+\eta))^2\, \eta^3\, \eta t\, \theta p + 4\, (x + \eta - x\,\eta)\, (w + x + \eta - w\,\eta - x\,\eta)^2\, (1 - \eta t)\, \theta l\, \theta p - 8\,\eta\, (x + \eta - x\,\eta)\, (w + x + \eta - w\,\eta - x\,\eta)^2\, (1 - \eta t)\, \theta l\, \theta p + 4\, (x + \eta - x\,\eta)\, (\eta - (-1 + w + x) \times (-1+\eta)\,\eta)^2\, (1 - \eta t)\, \theta l\, \theta p + 2\, (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\, (-1 + \eta t)\, \theta l\, \theta p - 4\, (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta\, (-1 + \eta t)\, \theta l\, \theta p + 2\, (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta^2\, (-1 + \eta t)\, \theta l\, \theta p + (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 1 - 2\, (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 1 + (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta^2\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 1 + (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 2 - 2\, (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 2 + (-1 + w\,(-1+\eta))^2\, (x\,(-1+\eta) - \eta)\,\eta^2\, (-1 + \eta t)\, \theta l\, \theta p\, \Phi 2\Big) \Big/ \Big(8\, (x\,(-1+\eta) - \eta)\, (1 + w - w\,\eta)^2\, (w + x + \eta - w\,\eta - x\,\eta)^2\, (-1 + \eta t)\, \theta p\Big)$$

In[•]:=
$$\delta m = \frac{1}{8\,r\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)^2}\,3\times$$
$$\Big(-12\times(-1+r)\,u\,(w+x+\eta-w\,\eta-x\,\eta)^2-\frac{1}{(-1+w\,(-1+\eta))^2\,(x\,(-1+\eta)-\eta)\,(-1+\eta t)\,\theta p}$$
$$f\,(-1+\eta)\,\big((x\,(-1+\eta)-\eta)\,\big(4\,x^2\,(-1+\eta)^2\,(-1+\eta+(-1+r)\times(-1+\eta t)\,\theta l)\,\theta p-x\,(-1+\eta)\times(8\times(-1+\eta)\,\eta\,\theta p+(-1+\eta t)\,\theta l\,(2+(-1+r)\,\theta p\,(2+8\,\eta+\Phi 1+\Phi 2)))+\theta p\,\big(4\,\eta^3-2\,\eta t+4\,\eta^2\,(-1+(-1+r)\times(-1+\eta t)\,\theta l)+\eta\,(-((-1+r)\,\theta l\,(2+\Phi 1+\Phi 2))+\eta t\,(2+(-1+r)\,\theta l\,(2+\Phi 1+\Phi 2)))\big)\big)+$$
$$w^2\,(-1+\eta)^2\,\big(x^2\,(-1+\eta)^2\,(8\times(-1+r)\times(-1+\eta)\,\theta p-(-1+\eta t)\,\theta l\,(2+\theta p\,(-10-\Phi 1-\Phi 2+r\,(18+\Phi 1+\Phi 2))))-2\,x\,(-1+\eta)\,((-1+\eta)\times(-2+8\times(-1+r)\,\eta-\eta t)\,\theta p-(-1+\eta t)\,\theta l\,(2+\eta-4\,\theta p-\theta p\,\Phi 1-\theta p\,\Phi 2-\eta\,\theta p\,(10+\Phi 1+\Phi 2)+r\,(-2+2\,\theta p\,(3+\Phi 1+\Phi 2)+\eta\,\theta p\,(18+\Phi 1+\Phi 2))))+\theta p\,\big(8\times(-1+r)\,\eta^3-4\times(-1+r)\,\eta t+\eta^2\,(4-10\,\theta l-\theta l\,\Phi 1-\theta l\,\Phi 2+\eta t\,(-2+\theta l\,(10+\Phi 1+\Phi 2))+r\,(-8-(-1+\eta t)\,\theta l\,(18+\Phi 1+\Phi 2)))-2\,\eta\,(-2+\theta l\,(4+\Phi 1+\Phi 2-2\,r\,(3+\Phi 1+\Phi 2))+\eta t\,(1-\theta l\,(4+\Phi 1+\Phi 2)+2\,r\,(-1+\theta l\,(3+\Phi 1+\Phi 2))))\big)\big)+$$
$$w\,(-1+\eta)\times\big(4\,x^3\,(-1+\eta)^3\,(1-\eta-\theta l+\eta t\,\theta l+r\,(-1+\eta+2\,\theta l-2\,\eta t\,\theta l))\,\theta p-2\,x^2\,(-1+\eta)^2\,(2\times(-1+\eta)\times(-2+3\times(-1+r)\,\eta)\,\theta p-(-1+\eta t)\,\theta l\,(2+\theta p\,(-6-6\,\eta-\Phi 1-\Phi 2+r\,(6+12\,\eta+\Phi 1+\Phi 2))))+\theta p\,\big(-4\times(-1+r)\,\eta^4+2\times(-1+r)\,\eta t+4\,\eta^3\,(1+r+\theta l+2\,r\,(-1+\eta t)\,\theta l-\eta t\,\theta l)+2\,\eta^2\,(-4-(-1+r)\,\theta l\,(6+\Phi 1+\Phi 2)+\eta t\,(2+(-1+r)\,\theta l\,(6+\Phi 1+\Phi 2)))+\eta\,(-((-1+2\,r)\,\theta l\,(2+\Phi 1+\Phi 2))+\eta t\,(-2-\theta l\,(2+\Phi 1+\Phi 2)+2\,r\,(-1+\theta l\,(2+\Phi 1+\Phi 2))))\big)+$$
$$x\,(-1+\eta)\times\big(4\times(-1+\eta)\times\big(-4\,\eta+3\times(-1+r)\,\eta^2-\eta t\big)\,\theta p-(-1+\eta t)\,\theta l\,\big(2+4\,\eta-2\,\theta p-12\,\eta^2\,\theta p-\theta p\,\Phi 1-\theta p\,\Phi 2-4\,\eta\,\theta p\,(6+\Phi 1+\Phi 2)+2\,r\,\big(-1+\theta p\,\big(2+12\,\eta^2+\Phi 1+\Phi 2+2\,\eta\,(6+\Phi 1+\Phi 2)\big)\big)\big)\big)+$$
$$w^3\,(-1+\eta)^3\,\big(x\,(-1+\eta)\times(4\times(-1+r)\times(-1+\eta)\,\theta p-(-1+\eta t)\,\theta l\,(2-\theta p\,(6+\Phi 1+\Phi 2)+2\,r\,(-1+\theta p\,(6+\Phi 1+\Phi 2))))+\theta p\,\big(-4\times(-1+r)\,\eta^2+2\times(-1+r)\,\eta t+\eta\,(-4+2\,\eta t+6\,\theta l+\theta l\,\Phi 1+\theta l\,\Phi 2-\eta t\,\theta l\,(6+\Phi 1+\Phi 2)+2\,r\,(2-\theta l\,(6+\Phi 1+\Phi 2)+\eta t\,(-1+\theta l\,(6+\Phi 1+\Phi 2))))\big)\big)\Big)$$

$$\delta g\psi = -\frac{f\,w\,(-1+\eta)^2\,(-1+\eta+\theta l-\eta t\,\theta l)}{2\,(-1+w\,(-1+\eta))^2\,(-1+\eta t)}$$

$$\delta gs = -\Big(\big((-1+\eta)\times\big(-2\,f\,(-1+w\,(-1+\eta))\,(x\,(-1+\eta)-\eta)\,(w\,(-1+\eta)+x\,(-1+\eta)-\eta)\,(1+x+\eta-x\,\eta)^2\,\theta l\,\big(x^2\,(-1+\eta)^2\,\theta p\,\big(12+8\,\eta t-12\,\theta l+12\,\eta t\,\theta l+2\,\eta\,(-14-\theta l\,(-4+\Phi 2)+\eta t\,(1+\theta l)\times(-4+\Phi 2)-\Phi 2)-4\,\eta^2\,(-4+\Phi 2)+6\,\Phi 2-2\,\eta t\,\Phi 2-4\,\theta l\,\Phi 2+4\,\eta t\,\theta l\,\Phi 2-5\,\theta l\,\Phi 2^2+5\,\eta t\,\theta l\,\Phi 2^2+w\,(-1+\eta)\times\big(2\,\eta^2\,(-4+\Phi 2)+\eta\,(4-2\,\eta t\,(-4+\Phi 2)+8\,\Phi 2)+(-2+5\,\Phi 2)\times(-2+\theta l\,(2+\Phi 2))+\eta t\,\big(2\times(-4+\Phi 2)+\theta l\,\big(4-8\,\Phi 2-5\,\Phi 2^2\big)\big)\big)\big)+\theta p\,\big(12\,\eta^2-28\,\eta^3+16\,\eta^4+4\,\eta t-4\,\eta\,\eta t+8\,\eta^2\,\eta t-8\,\eta^3\,\eta t-4\,\eta\,\theta l-12\,\eta^2\,\theta l+8\,\eta^3\,\theta l+4\,\eta\,\eta t\,\theta l+12\,\eta^2\,\eta t\,\theta l-8\,\eta^3\,\eta t\,\theta l+6\,\eta^2\,\Phi 2-2\,\eta^3\,\Phi 2-4\,\eta^4\,\Phi 2-10\,\eta t\,\Phi 2+10\,\eta\,\eta t\,\Phi 2-2\,\eta^2\,\eta t\,\Phi 2+2\,\eta^3\,\eta t\,\Phi 2+$$

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8 η θl Φ2 - 4 η^2 θl Φ2 - 2 η^3 θl Φ2 - 8 η ηt θl Φ2 + 4 η^2 ηt θl Φ2 +
2 η^3 ηt θl Φ2 + 5 η θl Φ2^2 - 5 η^2 θl Φ2^2 - 5 η ηt θl Φ2^2 +
5 η^2 ηt θl Φ2^2 - 2 w^2 (-1 + η)^3 (η - ηt) (-2 + η (-4 + Φ2) + 5 Φ2) +
w (-1 + η) × (-2 η^3 (6 + ηt (-4 + Φ2) - 6 Φ2) + 2 η^4 (-4 + Φ2) + 4 ηt
    (-2 + 5 Φ2) + η^2 (-8 × (-4 + Φ2) - (-1 + ηt) θl (-12 + 10 Φ2 + 5 Φ2^2)) +
    η (-6 × (2 + Φ2 + 3 ηt Φ2) + (-1 + ηt) θl (-20 + 12 Φ2 + 5 Φ2^2)))) -
x (-1 + η) × (-2 (w (-1 + η) - 2 η) (-1 + η) θp (-6 - 4 ηt - 2 η (-4 + Φ2) -
    3 Φ2 + ηt Φ2 + w (-1 + η) × (-2 + 4 ηt + η (-4 + Φ2) + 5 Φ2 - ηt Φ2)) +
  (-1 + ηt) θl (-4 + 10 Φ2 + 2 w^2 (-1 + η)^2 (-2 + 5 Φ2) +
    θp (4 + 4 η^2 (-4 + Φ2) - 8 Φ2 - 5 Φ2^2 + 2 η (12 + 4 Φ2 + 5 Φ2^2)) - w (-1 + η) ×
     (-8 + 20 Φ2 + θp (20 - 12 Φ2 - 5 Φ2^2 + 2 η (-8 + 9 Φ2 + 5 Φ2^2))))))) +
cv cσ (x (-1 + η) - η) (1 + x + η - x η)^2 ((x + η - x η)^2 (-1 + ηt) θl θp
  (1 + μ1) × (14 x (-1 + η) - 14 η - 5 × (2 + Φ1 + Φ2)) +
w (-1 + η) × (-4 x^3 (-1 + η)^3 θp (1 - 8 θl + 7 μ1 - 14 θl μ1 + 3 η^2 (1 + μ1) -
    η ηt (1 + 2 θl) × (1 + μ1) + 2 η (-2 + θl - 5 μ1 + θl μ1) +
    ηt (1 + 8 θl + μ1 + 14 θl μ1)) + x^2 (-1 + η)^2 θp (36 η^3 (1 + μ1) -
    12 η^2 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-2 + θl - 5 μ1 + θl μ1)) +
    12 η (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 + 2 θl (4 + 7 μ1))) +
    (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2)) -
  x (-1 + η) × (12 × (-1 + η) η^2 θp (-1 - 7 μ1 + 3 η (1 + μ1) - ηt (1 + μ1)) -
    (-1 + ηt) θl (20 × (1 + μ1) + θp (24 η^3 (1 + μ1) - 24 η^2 (4 + 7 μ1) +
        5 × (-6 - 3 Φ1 + Φ2) - 2 η (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) -
        μ1 (30 + 15 Φ1 + 19 Φ2)))) + θp (12 η^5 (1 + μ1) + 20 ηt (1 + μ1) -
    4 η^4 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-2 + θl - 5 μ1 + θl μ1)) +
    4 η^3 (1 + 7 μ1 - 2 θl (4 + 7 μ1) + ηt (1 + μ1 + 2 θl (4 + 7 μ1))) +
    η^2 (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) +
    η (-20 ηt (1 + μ1) - 5 θl (6 + 3 Φ1 - Φ2) - θl μ1 (30 + 15 Φ1 + 19 Φ2) +
      ηt θl (5 × (6 + 3 Φ1 - Φ2) + μ1 (30 + 15 Φ1 + 19 Φ2)))) + w^4 (-1 + η)^4
  (x (-1 + η) × (4 × (-1 + η) θp (1 - 5 μ1 + η (1 + μ1) - ηt (1 + μ1)) + (-1 + ηt)
      θl (-20 × (1 + μ1) + 5 θp (8 + 3 Φ1 - Φ2) + θp μ1 (64 + 15 Φ1 + 19 Φ2))) +
    θp (-4 η^3 (1 + μ1) - 20 ηt (1 + μ1) + 4 η^2 (ηt + 6 μ1 + ηt μ1) + η (4 - 20 μ1 +
        16 ηt (1 + μ1) + θl (40 + 64 μ1 + 15 Φ1 + 15 μ1 Φ1 - 5 Φ2 + 19 μ1 Φ2) -
        ηt θl (5 × (8 + 3 Φ1 - Φ2) + μ1 (64 + 15 Φ1 + 19 Φ2))))) +
w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (-2 - 5 θl + 10 μ1 - 17 θl μ1 + 2 η^2
      (1 + μ1) - 2 η (ηt + 6 μ1 + ηt μ1) + ηt (2 + 5 θl + 2 μ1 + 17 θl μ1)) -
    x^2 (-1 + η)^2 θp (8 - 94 θl + 56 μ1 - 142 θl μ1 + 12 η^3 (1 + μ1) +
    8 ηt (1 + μ1) - 12 η^2 (-2 + ηt + 4 μ1 + ηt μ1) +
    2 η (-22 - 7 θl - 10 μ1 - 43 θl μ1 + ηt (2 + 7 θl + 2 μ1 + 43 θl μ1)) -
    15 θl Φ1 - 15 θl μ1 Φ1 - 15 θl Φ2 - 15 θl μ1 Φ2 +
    ηt θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))) +
    x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) - 3 η (-5 + ηt + μ1 + ηt μ1) -
        4 × (1 + ηt + 7 μ1 + ηt μ1)) + (-1 + ηt) θl (-60 × (1 + μ1) +
        θp (104 + η^2 (-2 + 70 μ1) + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2) +
          2 η (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2))))) +
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θp (-4 η^5 (1 + μ1) - 60 ηt (1 + μ1) + 4 η^4 (-6 + ηt + ηt μ1) +
    η^3 (36 + 60 μ1 + 6 θl (-1 + 3 μ1) + ηt (4 + 6 θl + 4 μ1 - 18 θl μ1)) +
    η (60 ηt (1 + μ1) + θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2)) -
        ηt θl (104 + 45 Φ1 - 15 Φ2 + μ1 (104 + 45 Φ1 + 57 Φ2))) - η^2 (8 +
        56 μ1 - θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)) + ηt (8 × (1 +
                μ1) + θl (94 + 15 Φ1 + 15 Φ2 + μ1 (142 + 15 Φ1 + 15 Φ2)))))) +
w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (-8 - 30 θl + 40 μ1 - 78 θl μ1 + 8 η^2 (1 + μ1) -
    8 η (ηt + 6 μ1 + ηt μ1) - 5 θl Φ1 - 5 θl μ1 Φ1 - 5 θl Φ2 - 5 θl μ1 Φ2 +
    ηt (8 × (1 + μ1) + 5 θl (6 + Φ1 + Φ2) + θl μ1 (78 + 5 Φ1 + 5 Φ2))) -
    x (-1 + η) × (4 × (-1 + η) θp (-1 - 7 μ1 + 4 η^2 (1 + μ1) - ηt (1 + μ1) -
        η (-7 + 17 μ1 + 4 ηt (1 + μ1))) + (-1 + ηt) θl
      (-60 × (1 + μ1) + θp (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2) +
            2 η (26 + 5 Φ1 + 5 Φ2 + μ1 (74 + 5 Φ1 + 5 Φ2))))) +
    θp (8 η^4 (1 + μ1) + 60 ηt (1 + μ1) - 4 η^3 (-3 + 9 μ1 + 2 ηt (1 + μ1)) +
    η^2 (-24 - θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)) +
        ηt (4 × (1 + μ1) + θl (22 + 5 Φ1 + 5 Φ2 + 5 μ1 (14 + Φ1 + Φ2)))) +
    η (4 + 28 μ1 - θl (122 + 45 Φ1 - 15 Φ2 + μ1 (146 + 45 Φ1 + 57 Φ2)) +
        ηt (-56 × (1 + μ1) + θl (122 + 45 Φ1 - 15 Φ2 +
                μ1 (146 + 45 Φ1 + 57 Φ2))))))) +
2 cσ^2 (-1 + η) × (2 x^6 (-1 + η)^6 θp (2 - 2 θl - 9 μ1 - 15 w μ1 - 4 w^2 μ1 +
    5 θl μ1 + 7 w θl μ1 - 5 μ1^2 - 9 w μ1^2 - 4 w^2 μ1^2 + θl μ1^2 +
    w θl μ1^2 + w^2 η^4 (1 + μ1) - w η^3 (3 + w (3 + ηt - 4 μ1)) × (1 + μ1) +
    η^2 (2 × (1 + μ1) + 3 w^2 (1 + ηt - 4 μ1) × (1 + μ1) +
        3 w (2 + ηt - 3 μ1 + ηt μ1 - 3 μ1^2)) + ηt (2 × (1 + μ1) + w^2 (1 + μ1) -
        θl (-2 + 5 μ1 + μ1^2) + w (3 + (3 - 7 θl) μ1 - θl μ1^2)) -
    η (4 + 2 ηt - 7 μ1 + 2 ηt μ1 - 5 μ1^2 + w^2 (1 + 3 ηt - 12 μ1) × (1 + μ1) + w (3 +
            (-27 + 7 θl) μ1 + (-18 + θl) μ1^2 + ηt (6 + (6 - 7 θl) μ1 - θl μ1^2)))) +
θp (w^4 (-1 + η)^5 (2 η^5 (1 + μ1) + 2 η ηt (μ1^2 + 5 μ1 (-2 + μ2) + 5 × (-1 + μ2)) -
    2 η^4 (-2 - 4 μ1^2 + ηt (1 + μ1) + 6 μ1 (-1 + μ2)) + 5 ηt (1 + μ1) μ2 +
    2 η^3 (6 + 7 μ1^2 - 13 μ1 (-1 + μ2) + 11 μ2 + ηt (-2 + μ1 (-2 + 6 μ2))) +
    η^2 (2 × (5 + 3 μ1^2 + 11 μ2 + μ1 (8 + 5 μ2)) +
        ηt (-12 + 26 μ1^2 + 5 μ2 + μ1 (-22 + 17 μ2)))) - w^3 (-1 + η)^3
  (4 η^7 (1 + μ1) + 2 η^6 (5 + 8 μ1^2 - 2 ηt (1 + μ1) + μ1 (13 - 12 μ2)) -
    2 η ηt (4 μ1^2 + 5 × (-4 + μ2) + 17 μ1 (-2 + μ2)) - 15 ηt (1 + μ1) μ2 +
    2 η^5 (11 + 15 μ1^2 - 32 μ1 (-1 + μ2) + 22 μ2 + ηt (-5 + μ1 (-5 + 12 μ2))) -
    η^2 (10 μ1^2 + ηt (-26 + 60 μ1^2 + 5 θl Φ1 + μ2 (-24 + 5 θl (Φ1 - Φ2)) +
            μ1 (-62 + μ2 (48 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - 5 θl Φ2) +
        μ1 (62 - 11 θl (Φ1 - Φ2) + μ2 (12 - 5 θl Φ1 + 5 θl Φ2)) +
        5 × (8 + θl (-Φ1 + Φ2) + μ2 (12 + θl (-Φ1 + Φ2)))) +
    2 η^3 (-13 - 15 μ1^2 - 26 μ2 + 5 θl Φ1 + 5 θl μ2 Φ1 + μ1 (-34 +
            μ2 (52 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - 5 θl Φ2 - 5 θl μ2 Φ2 +
        ηt (24 μ1^2 - 11 μ1 (3 + θl (Φ1 - Φ2)) + μ1 μ2 (5 - 5 θl Φ1 + 5 θl Φ2) +
            5 × (-3 + μ2 + θl (-Φ1 + Φ2) + θl μ2 (-Φ1 + Φ2)))) +
    η^4 (30 - 6 μ1^2 + 68 μ2 + 5 θl Φ1 + 5 θl μ2 Φ1 + μ1 (36 + μ2
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$$
\begin{aligned}
&\quad (-4 + 5\,\theta l\,(\Phi 1 - \Phi 2)) + 11\,\theta l\,(\Phi 1 - \Phi 2)) - 5\,\theta l\,\Phi 2 - 5\,\theta l\,\mu 2\,\Phi 2 + \\
&\quad \eta t\,\big(-22 + 20\,\mu 1^2 - 5\,\theta l\,\Phi 1 + 5\,\theta l\,\Phi 2 + \mu 2\,(-9 - 5\,\theta l\,\Phi 1 + 5\,\theta l\,\Phi 2) + \\
&\quad \mu 1\,(-50 - 11\,\theta l\,\Phi 1 + 11\,\theta l\,\Phi 2 + \mu 2\,(63 - 5\,\theta l\,\Phi 1 + 5\,\theta l\,\Phi 2))\big)\big)\big) + \\
&\eta\,\big(4\,\eta^7\,(1 + \mu 1) + \eta t\,\big(-2\,\mu 1^2 + \mu 1\,(8 - 19\,\mu 2) + 5 \times (2 + \mu 2)\big) - \\
&\quad 2\,\eta^6\,(2\,\eta t\,(1 + \mu 1) + \mu 1\,(-11 - 5\,\mu 1 + 12\,\mu 2)) + \\
&\quad \eta^5\,\big(2 + 22\,\mu 1 + 8\,\mu 1^2 + 22\,\mu 2 - 14\,\mu 1\,\mu 2 + 4\,\eta t\,\big(-1 + \mu 1^2 + 3\,\mu 1\,\mu 2\big) + \\
&\quad \theta l\,\big(2 \times (-2 + \mu 2) + \mu 1^2\,(4 + \Phi 1 + \Phi 2) + \mu 1\,(12 - 10\,\mu 2 + \Phi 1 + \Phi 2)\big) - \\
&\quad \eta t\,\theta l\,\big(2 \times (-2 + \mu 2) + \mu 1^2\,(4 + \Phi 1 + \Phi 2) + \mu 1\,(12 - 10\,\mu 2 + \Phi 1 + \Phi 2)\big)\big) - \\
&\quad \eta^3\,\big(6 + 26\,\mu 1 + 8\,\mu 1^2 + 30\,\mu 2 - 30\,\mu 1\,\mu 2 - \theta l\,\big(6 + 5 \times (1 + \mu 2)\,\Phi 1 + \\
&\quad \mu 1\,(-4 + 21\,\Phi 1 + \mu 2\,(36 + 5\,\Phi 1 - 17\,\Phi 2) - 15\,\Phi 2) - 5\,\Phi 2 - 5\,\mu 2\,\Phi 2 + \\
&\quad 2\,\mu 1^2\,(1 + 2\,\Phi 1 + \Phi 2)\big) + \eta t\,\big(16 + 32\,\mu 1 - 8\,\mu 1^2 + 5\,\mu 2 - 7\,\mu 1\,\mu 2 + \\
&\quad \theta l\,\big(6 + 5 \times (1 + \mu 2)\,\Phi 1 + \mu 1\,(-4 + 21\,\Phi 1 + \mu 2\,(36 + 5\,\Phi 1 - 17\,\Phi 2) - \\
&\quad 15\,\Phi 2) - 5\,\Phi 2 - 5\,\mu 2\,\Phi 2 + 2\,\mu 1^2\,(1 + 2\,\Phi 1 + \Phi 2)\big)\big)\big) - \\
&\quad 2\,\eta^4\,\big(-10 + 3\,\mu 1 + 7\,\mu 1^2 - 8\,\mu 2 - 20\,\mu 1\,\mu 2 - \theta l\,\big(1 + 4\,\mu 2 + \mu 1^2 \\
&\quad (3 + 2\,\Phi 1 + \Phi 2) + \mu 1\,(10 - 2\,\mu 2 + 5\,\Phi 1 - 2\,\Phi 2 - 6\,\mu 2\,\Phi 2)\big) + \\
&\quad \eta t\,\big(-2 \times \big(1 + \mu 1^2 - \mu 2 + \mu 1\,(-4 + 5\,\mu 2)\big) + \theta l\,\big(1 + 4\,\mu 2 + \\
&\quad \mu 1^2\,(3 + 2\,\Phi 1 + \Phi 2) + \mu 1\,(10 - 2\,\mu 2 + 5\,\Phi 1 - 2\,\Phi 2 - 6\,\mu 2\,\Phi 2)\big)\big)\big) + \\
&\quad \eta\,\big(\theta l\,\big(5 \times (1 + \mu 2) \times (-2 + \Phi 1 - \Phi 2) + \mu 1^2\,(2 - \Phi 1 + \Phi 2) + \\
&\quad \mu 1\,(5\,\mu 2\,\Phi 1 + 4 \times (-2 + \Phi 1 - \Phi 2) + 7\,\mu 2\,(2 + \Phi 2))\big) + \\
&\quad \eta t\,\big(20 + 24\,\mu 1 + 4\,\mu 1^2 + 5\,\mu 2 - 19\,\mu 1\,\mu 2 + \theta l \\
&\quad \big(\mu 1^2\,(-2 + \Phi 1 - \Phi 2) - 5 \times (1 + \mu 2) \times (-2 + \Phi 1 - \Phi 2) - \\
&\quad \mu 1\,(5\,\mu 2\,\Phi 1 + 4 \times (-2 + \Phi 1 - \Phi 2) + 7\,\mu 2\,(2 + \Phi 2))\big)\big)\big) - \\
&\quad \eta^2\,\big(-2 \times \big(2 \times \big(-5 + \mu 1^2 - 2\,\mu 2 - 4\,\mu 1\,(1 + 2\,\mu 2)\big) + \theta l\,\big(-5 - \\
&\quad 8\,\mu 2 + 5\,\Phi 1 + 5\,\mu 2\,\Phi 1 - 5\,\Phi 2 - 5\,\mu 2\,\Phi 2 + \mu 1^2\,(1 + \Phi 2) + \\
&\quad \mu 1\,(-10 + 8\,\Phi 1 - 7\,\Phi 2 + \mu 2\,(22 + 5\,\Phi 1 + \Phi 2))\big)\big) + \\
&\quad \eta t\,\big(10 + 18\,\mu 1^2 + \mu 1\,(-20 + \mu 2) + \mu 2 + 2\,\theta l\,\big(-5 - 8\,\mu 2 + \\
&\quad 5\,\Phi 1 + 5\,\mu 2\,\Phi 1 - 5\,\Phi 2 - 5\,\mu 2\,\Phi 2 + \mu 1^2\,(1 + \Phi 2) + \\
&\quad \mu 1\,(-10 + 8\,\Phi 1 - 7\,\Phi 2 + \mu 2\,(22 + 5\,\Phi 1 + \Phi 2))\big)\big)\big)\big) - w\,(-1 + \eta) \times \\
&\big(6\,\eta^8\,(1 + \mu 1) + 2\,\eta^7\,\big(7 + 9\,\mu 1^2 - 3\,\eta t\,(1 + \mu 1) + \mu 1\,(22 - 18\,\mu 2)\big) - \\
&\quad 5\,\eta t\,(1 + \mu 1)\,\mu 2 + 2\,\eta\,\eta t\,\big(-4\,\mu 1^2 + \mu 1\,(22 - 31\,\mu 2) + 5 \times (4 + \mu 2)\big) + \\
&\quad \eta^6\,\big(2 \times (7 + (22 + \theta l)\,\mu 2) + \mu 1^2\,(34 + \theta l\,(4 + \Phi 1 + \Phi 2)) + \\
&\quad \mu 1\,(84 - 76\,\mu 2 + \theta l\,(16 - 10\,\mu 2 + \Phi 1 + \Phi 2)) - \\
&\quad \eta t\,\big(2 \times (7 + \theta l\,\mu 2) + \mu 1^2\,(-4 + \theta l\,(4 + \Phi 1 + \Phi 2)) + \\
&\quad \mu 1\,(10 - 24\,\mu 2 + \theta l\,(16 - 10\,\mu 2 + \Phi 1 + \Phi 2))\big)\big) - \\
&\quad \eta^3\,\big(52 + 84\,\mu 1 + 8\,\mu 1^2 + 72\,\mu 2 + 24\,\mu 1\,\mu 2 - \theta l\,\big(-28 + 30\,\Phi 1 + \\
&\quad \mu 1\,(-46 + 55\,\Phi 1 + \mu 2\,(98 + 30\,\Phi 1 - 6\,\Phi 2) - 49\,\Phi 2) + \\
&\quad \mu 2\,(-34 + 30\,\Phi 1 - 30\,\Phi 2) - 30\,\Phi 2 + \mu 1^2\,(6 + \Phi 1 + 5\,\Phi 2)\big) + \\
&\quad \eta t\,\big(2 \times \big(16 + 22\,\mu 1^2 + \mu 1\,(-4 + \mu 2) + \mu 2\big) + \theta l\,\big(-28 + 30\,\Phi 1 + \\
&\quad \mu 1\,(-46 + 55\,\Phi 1 + \mu 2\,(98 + 30\,\Phi 1 - 6\,\Phi 2) - 49\,\Phi 2) + \\
&\quad \mu 2\,(-34 + 30\,\Phi 1 - 30\,\Phi 2) - 30\,\Phi 2 + \mu 1^2\,(6 + \Phi 1 + 5\,\Phi 2)\big)\big)\big) - \\
&\quad \eta^4\,\big(74\,\mu 1 + 38\,\mu 1^2 + 40\,\mu 2 - 128\,\mu 1\,\mu 2 - \theta l\,\big(4 + 15\,\Phi 1 + \mu 1 \\
&\quad (14 + 54\,\Phi 1 + 3\,\mu 2\,(14 + 5\,\Phi 1 - 13\,\Phi 2) - 40\,\Phi 2) + \\
&\quad 3\,\mu 2\,(2 + 5\,\Phi 1 - 5\,\Phi 2) - 15\,\Phi 2 + \mu 1^2\,(9\,\Phi 1 + 5 \times (2 + \Phi 2))\big) +
\end{aligned}
$$

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            ηt (46 + 102 μ1 - 40 μ1^2 + 19 μ2 - 53 μ1 μ2 + θl
                (4 + 15 Φ1 + μ1 (14 + 54 Φ1 + 3 μ2 (14 + 5 Φ1 - 13 Φ2) - 40 Φ2) +
                  3 μ2 (2 + 5 Φ1 - 5 Φ2) - 15 Φ2 + μ1^2 (9 Φ1 + 5 × (2 + Φ2)))) +
        η^2 (4 × (1 + μ1) × (-5 + μ1 - 3 μ2) + θl (3 μ2 (-8 + 5 Φ1 - 5 Φ2) +
              5 × (-4 + 3 Φ1 - 3 Φ2) + μ1^2 (2 - 2 Φ1 + 2 Φ2) +
              μ1 (-30 + 19 Φ1 - 19 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2))) +
            ηt (-4 × (-15 - 26 μ1 + μ1^2 - 6 μ2 + 18 μ1 μ2) + θl (-3 μ2 (-8 +
                  5 Φ1 - 5 Φ2) + 2 μ1^2 (-1 + Φ1 - Φ2) + 5 × (4 - 3 Φ1 + 3 Φ2) -
                μ1 (-30 + 19 Φ1 - 19 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2)))) +
        η^5 (38 + 40 μ1 - 10 μ1^2 + 80 μ2 + 20 μ1 μ2 + θl (6 × (2 + 3 μ2) + μ1^2
                (10 + 7 Φ1 + 3 Φ2) + μ1 (46 + 19 Φ1 - 9 Φ2 - 6 μ2 (3 + 4 Φ2))) - ηt
              (2 + 38 μ1 - 12 μ1^2 + 8 μ2 - 64 μ1 μ2 + θl (6 × (2 + 3 μ2) + μ1^2 (10 + 7
                    Φ1 + 3 Φ2) + μ1 (46 + 19 Φ1 - 9 Φ2 - 6 μ2 (3 + 4 Φ2))))) +
    w^2 (-1 + η)^2 (2 η^8 (1 + μ1) - 15 ηt (1 + μ1) μ2 - 2 η^7 (-7 + ηt -
              11 μ1 + ηt μ1 - 4 μ1^2 + 6 μ1 μ2) - 12 η ηt (-5 + μ1^2 + μ1 (-7 + 6 μ2)) +
        2 η^6 (12 + 21 μ1^2 + μ1 (45 - 43 μ2) + 11 μ2 + ηt (-7 + μ1 (-7 + 6 μ2))) -
        η^3 (2 × (30 + 17 μ1^2 + μ1 (65 - 38 μ2) + 58 μ2) -
              θl (μ1 (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
                6 × (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + μ1^2 (4 + Φ1 + 3 Φ2)) +
              ηt (44 + 4 μ1^2 - 4 μ1 (-15 + μ2) - 4 μ2 + θl μ1
                  (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
                6 θl (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + θl μ1^2 (4 + Φ1 + 3 Φ2)) +
        η^2 (-2 × (23 + 25 μ2 + μ1 (29 + 7 μ2)) - θl (- ((1 + μ2) ×
                  (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) + 26 μ1 (1 - Φ1 + Φ2) +
                μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)) + ηt (64 + 140 μ1 - 44 μ1^2 + 38 μ2 - 94
                  μ1 μ2 + θl (- ((1 + μ2) × (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
                    26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)))) +
        η^4 (20 - 34 μ1 - 42 μ1^2 + 36 μ2 + 108 μ1 μ2 + θl (μ1 (26 + 44 Φ1 + 3 μ2
                  (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) + 3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) +
                μ1^2 (8 + 5 Φ1 + 3 Φ2)) - ηt (50 + 118 μ1 - 52 μ1^2 + 23 μ2 -
                97 μ1 μ2 + θl (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
                    3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2)))) +
        η^5 (46 + 26 μ1^2 + 108 μ2 + 10 θl (1 + μ2) - 36 μ1 (-3 + 2 μ2) +
              θl μ1^2 (4 + 3 Φ1 + Φ2) + θl μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)) -
              ηt (14 + 30 μ1 - 8 μ1^2 + 4 μ2 - 68 μ1 μ2 + θl (10 × (1 + μ2) + μ1^2 (4 +
                    3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))))) -
    x^3 (-1 + η)^3 ((-1 + η) θp (20 + 104 η + 36 η^2 + 80 η^4 - 20 ηt - 16 η ηt -
        80 η^2 ηt - 80 η^3 ηt + 16 μ1 + 168 η μ1 + 456 η^2 μ1 + 440 η^3 μ1 +
        80 η^4 μ1 - 48 ηt μ1 - 80 η ηt μ1 - 64 η^2 ηt μ1 - 80 η^3 ηt μ1 -
        4 μ1^2 + 16 η μ1^2 + 180 η^2 μ1^2 + 200 η^3 μ1^2 + 44 ηt μ1^2 +
        32 η ηt μ1^2 + 16 η^2 ηt μ1^2 + 12 μ2 + 152 η μ2 + 196 η^2 μ2 -
        9 ηt μ2 - 16 η ηt μ2 + 12 μ1 μ2 + 8 η μ1 μ2 - 116 η^2 μ1 μ2 -
        240 η^3 μ1 μ2 + 39 ηt μ1 μ2 + 128 η ηt μ1 μ2 + 120 η^2 ηt μ1 μ2 +
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2 w^4 (-1 + η)^4 (5 + 12 μ1 + 7 μ1^2 + 4 η^2 (1 + μ1) + 11 μ2 - 7 μ1 μ2 + 2 η (1 +
        9 μ1 + 8 μ1^2 - 2 ηt (1 + μ1) - 3 μ1 μ2) + ηt (-2 - 2 μ1 + 6 μ1 μ2)) -
w^3 (-1 + η)^3 (60 + 40 μ1^2 + 44 ηt μ1^2 + 40 η^3 (1 + μ1) +
    4 μ1 (31 - 14 μ2) + 112 μ2 - 9 ηt (4 + μ2) + ηt μ1 (-64 + 87 μ2) +
    8 η^2 (7 + 27 μ1 + 20 μ1^2 - 5 ηt (1 + μ1) - 12 μ1 μ2) + 4 η (24 + 82 μ1 +
        46 μ1^2 + 44 μ2 - 43 μ1 μ2 + 2 ηt (-7 - 7 μ1 + 12 μ1 μ2))) +
w^2 (-1 + η)^2 (40 η^4 (1 + μ1) + 2 × (51 + 92 μ1 + 17 μ1^2 + 83 μ2 -
        19 μ1 μ2) - 40 η^3 (-4 + ηt - 8 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
    ηt (-80 - 164 μ1 + 132 μ1^2 - 27 μ2 + 177 μ1 μ2) +
    4 η^2 (55 + 240 μ1 + 125 μ1^2 + 55 μ2 - 119 μ1 μ2 +
        10 ηt (-4 - 4 μ1 + 3 μ1 μ2)) + 4 η (71 + 207 μ1 + 76 μ1^2 +
        130 μ2 - 98 μ1 μ2 + ηt (-30 - 46 μ1 + 8 μ1^2 - 4 μ2 + 80 μ1 μ2))) -
w (-1 + η) × (120 η^4 (1 + μ1) + 40 η^3 (5 + 9 μ1^2 - 3 ηt (1 + μ1) +
        μ1 (20 - 9 μ2)) + 4 × (18 + μ1^2 + 22 μ2 + μ1 (25 + 4 μ2)) +
    ηt (-68 + 132 μ1^2 - 27 μ2 + μ1 (-152 + 141 μ2)) +
    8 η^2 (26 + 65 μ1^2 + μ1 (151 - 62 μ2) + 52 μ2 + ηt (-25 + 2 μ1^2 +
            μ1 (-23 + 30 μ2))) + 8 η (33 + 21 μ1^2 - 28 μ1 (-3 + μ2) +
        62 μ2 + ηt (-11 + 8 μ1^2 - 4 μ2 + μ1 (-27 + 44 μ2))))) +
(-1 + ηt) θl (-30 - 60 η + 10 θp - 24 η θp - 20 η^2 θp + 80 η^3 θp -
    32 μ1 - 160 η μ1 - 120 η^2 μ1 + 24 η^3 μ1 + 18 θp μ1 + 10 η θp μ1 -
    188 η^2 θp μ1 - 220 η^3 θp μ1 + 10 μ1^2 + 56 η μ1^2 + 24 η^2 μ1^2 +
    24 η^3 μ1^2 - 4 θp μ1^2 - 14 η θp μ1^2 - 48 η^2 θp μ1^2 - 60 η^3 θp μ1^2 +
    w^4 (-1 + η)^4 (26 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2)) - 10 μ2 -
    15 η μ2 + 14 θp μ2 - 6 η θp μ2 - 68 η^2 θp μ2 - 20 η^3 θp μ2 + 38 μ1 μ2 +
    57 η μ1 μ2 - 34 θp μ1 μ2 - 114 η θp μ1 μ2 - 20 η^2 θp μ1 μ2 +
    100 η^3 θp μ1 μ2 - 10 θp Φ1 - 20 η θp Φ1 - 17 θp μ1 Φ1 - 87 η θp μ1 Φ1 -
    94 η^2 θp μ1 Φ1 - 10 η^3 θp μ1 Φ1 - θp μ1^2 Φ1 - 19 η θp μ1^2 Φ1 -
    34 η^2 θp μ1^2 Φ1 - 10 η^3 θp μ1^2 Φ1 - 10 θp μ2 Φ1 - 20 η θp μ2 Φ1 -
    10 θp μ1 μ2 Φ1 - 20 η θp μ1 μ2 Φ1 - w^3 (-1 + η)^3 (76 μ1^2 +
        η (60 μ1^2 + μ1 (-156 + μ2 (57 - 20 θp (Φ1 - Φ2)) - 44 θp (Φ1 - Φ2)) -
            5 × (12 + 3 μ2 + 4 θp (Φ1 - Φ2) + 4 θp μ2 (Φ1 - Φ2))) +
        μ1 (-128 + μ2 (53 - 10 θp (Φ1 - Φ2)) - 22 θp (Φ1 - Φ2)) -
        5 × (12 - μ2 + 2 θp (Φ1 - Φ2) + 2 θp μ2 (Φ1 - Φ2))) + 10 θp Φ2 +
    20 η θp Φ2 + 13 θp μ1 Φ2 + 57 η θp μ1 Φ2 + 46 η^2 θp μ1 Φ2 -
    10 η^3 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 11 η θp μ1^2 Φ2 - 14 η^2 θp μ1^2 Φ2 -
    10 η^3 θp μ1^2 Φ2 + 10 θp μ2 Φ2 + 20 η θp μ2 Φ2 -
    2 θp μ1 μ2 Φ2 + 68 η θp μ1 μ2 Φ2 + 120 η^2 θp μ1 μ2 Φ2 +
    w (-1 + η) × (100 + 152 μ1 - 44 μ1^2 + 25 μ2 - 119 μ1 μ2 +
        2 θp (-14 + 15 Φ1 + μ1 (-22 + 28 Φ1 + μ2 (44 + 15 Φ1 - 3 Φ2) - 24 Φ2) +
            μ2 (-16 + 15 Φ1 - 15 Φ2) - 15 Φ2 + μ1^2 (4 + Φ1 + 3 Φ2)) +
        2 η^3 (10 θp μ2 + μ1^2 (-12 + 5 θp (6 + Φ1 + Φ2)) +
            μ1 (-12 + 5 θp (30 - 10 μ2 + Φ1 + Φ2))) +
        η (180 + 472 μ1 - 176 μ1^2 + 45 μ2 - 171 μ1 μ2 + θp (16 + 60 Φ1 +
                μ1 (62 + 219 Φ1 + 6 μ2 (23 + 10 Φ1 - 26 Φ2) - 157 Φ2) + 30 μ2
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                (1 + 2 Φ1 - 2 Φ2) - 60 Φ2 + μ1^2 (39 Φ1 + 23 × (2 + Φ2)))) +
        8 η^2 (-6 × (-5 + μ1) μ1 + θp (3 × (5 + 7 μ2) + μ1^2 (11 + 8 Φ1 +
                3 Φ2) + μ1 (56 + 23 Φ1 - 12 Φ2 - 15 μ2 (1 + 2 Φ2))))) -
    w^2 (-1 + η)^2 (-84 μ1^2 + 3 μ1 (76 - 43 μ2) + 15 × (8 + μ2) +
        θp μ1 (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
        6 θp (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + θp μ1^2 (4 + Φ1 + 3 Φ2) +
        η (-9 × (20 μ1^2 - 5 × (4 + μ2) + μ1 (-52 + 19 μ2)) +
            4 θp (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
                3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2)) +
        2 η^2 (-12 × (-5 + μ1) μ1 + 5 θp (10 × (1 + μ2) + μ1^2 (4 +
                3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)))))))) +
x^4 (-1 + η)^4 (2 × (-1 + η) θp (13 + 7 η - 10 η^2 + 30 η^3 - 2 ηt - 20 η ηt -
        30 η^2 ηt + 21 μ1 + 112 η μ1 + 155 η^2 μ1 + 30 η^3 μ1 - 10 ηt μ1 -
        18 η ηt μ1 - 30 η^2 ηt μ1 + 2 μ1^2 + 45 η μ1^2 + 75 η^2 μ1^2 +
        4 ηt μ1^2 + 2 η ηt μ1^2 + w^4 (-1 + η)^4 (1 + μ1) (η - ηt + 4 μ1) +
        19 μ2 + 47 η μ2 - 2 ηt μ2 + μ1 μ2 - 7 η μ1 μ2 -
        60 η^2 μ1 μ2 + 16 ηt μ1 μ2 + 30 η ηt μ1 μ2 - w^3 (-1 + η)^3
          (10 + 39 μ1 + 23 μ1^2 + 10 η^2 (1 + μ1) + 22 μ2 - 14 μ1 μ2 + η (7 + 47 μ1 +
                40 μ1^2 - 10 ηt (1 + μ1) - 12 μ1 μ2) + ηt (-7 - 7 μ1 + 12 μ1 μ2)) +
        w^2 (-1 + η)^2 (33 + 101 μ1 + 38 μ1^2 + 15 η^3 (1 + μ1) + 65 μ2 -
            37 μ1 μ2 + ηt (-15 - 23 μ1 + 4 μ1^2 - 2 μ2 + 40 μ1 μ2) - 5 η^2
              (3 ηt (1 + μ1) - 2 × (4 + 10 μ1 + 6 μ1^2 - 3 μ1 μ2)) + η (40 + 225 μ1 +
                125 μ1^2 + 55 μ2 - 77 μ1 μ2 + 10 ηt (-4 - 4 μ1 + 3 μ1 μ2))) -
        w (-1 + η) × (32 + 83 μ1 + 21 μ1^2 + 45 η^3 (1 + μ1) + 62 μ2 -
            22 μ1 μ2 + 5 η^2 (10 + 55 μ1 + 27 μ1^2 - 9 ηt (1 + μ1) - 18 μ1 μ2) +
            ηt (-11 - 27 μ1 + 8 μ1^2 - 4 μ2 + 44 μ1 μ2) + η (41 + 291 μ1 + 130 μ1^2 +
                102 μ2 - 72 μ1 μ2 + 2 ηt (-25 + μ1^2 + 6 μ1 (-4 + 5 μ2))))) +
    (-1 + ηt) θl (-20 - 6 θp - 10 η θp + 60 η^2 θp - 52 μ1 - 80 η μ1 +
        16 η^2 μ1 + 2 θp μ1 - 92 η θp μ1 - 160 η^2 θp μ1 + 28 μ1^2 + 16 η μ1^2 +
        16 η^2 μ1^2 - 4 θp μ1^2 - 22 η θp μ1^2 - 40 η^2 θp μ1^2 - 5 μ2 -
        2 θp μ2 - 32 η θp μ2 - 10 η^2 θp μ2 + 19 μ1 μ2 - 26 θp μ1 μ2 -
        20 η θp μ1 μ2 + 50 η^2 θp μ1 μ2 - 5 θp Φ1 - 22 θp μ1 Φ1 -
        46 η θp μ1 Φ1 - 5 η^2 θp μ1 Φ1 - 5 θp μ1^2 Φ1 - 16 η θp μ1^2 Φ1 -
        5 η^2 θp μ1^2 Φ1 - 5 θp μ2 Φ1 - 5 θp μ1 μ2 Φ1 + 5 θp Φ2 + 14 θp μ1 Φ2 +
        24 η θp μ1 Φ2 - 5 η^2 θp μ1 Φ2 - 3 θp μ1^2 Φ2 - 6 η θp μ1^2 Φ2 -
        5 η^2 θp μ1^2 Φ2 + 5 θp μ2 Φ2 + 17 θp μ1 μ2 Φ2 + 60 η θp μ1 μ2 Φ2 -
        w^3 (-1 + η)^3 (28 μ1^2 - 5 × (4 + μ2 + θp (Φ1 - Φ2) + θp μ2 (Φ1 - Φ2)) +
            μ1 (-52 - 11 θp (Φ1 - Φ2) + μ2 (19 - 5 θp Φ1 + 5 θp Φ2))) -
        w^2 (-1 + η)^2 (60 + 156 μ1 + 80 η μ1 - 84 μ1^2 - 16 η μ1^2 + 15 μ2 - 57 μ1 μ2 +
            θp (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) + 3 × (1 + μ2) ×
                (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2) + 5 η (10 × (1 + μ2) + μ1^2
                  (4 + 3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))))) +
        w (-1 + η) × (60 + 156 μ1 + 160 η μ1 - 16 η^2 μ1 - 84 μ1^2 -
            32 η μ1^2 - 16 η^2 μ1^2 + 15 μ2 - 57 μ1 μ2 + θp (4 + 8 μ2 + 15 Φ1 +
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                15 μ2 Φ1 + μ1 (16 + 55 Φ1 + μ2 (32 + 15 Φ1 - 39 Φ2) - 39 Φ2) -
                15 Φ2 - 15 μ2 Φ2 + 2 μ1^2 (6 + 5 Φ1 + 3 Φ2) +
                5 η^2 (2 μ2 + μ1^2 (8 + Φ1 + Φ2) + μ1 (44 - 10 μ2 + Φ1 + Φ2)) +
                η (60 + 82 μ2 + μ1^2 (42 + 31 Φ1 + 11 Φ2) +
                    μ1 (222 + 91 Φ1 - 49 Φ2 - 10 μ2 (5 + 12 Φ2)))))) +
x^2 (-1 + η)^2 ((-1 + η) θp (60 η + 156 η^2 + 44 η^3 + 20 η^4 + 60 η^5 - 30 ηt -
    60 η ηt - 24 η^2 ηt - 80 η^3 ηt - 60 η^4 ηt + 48 η μ1 +
    252 η^2 μ1 + 464 η^3 μ1 + 350 η^4 μ1 + 60 η^5 μ1 - 32 ηt μ1 -
    148 η ηt μ1 - 120 η^2 ηt μ1 - 56 η^3 ηt μ1 - 60 η^4 ηt μ1 -
    12 η μ1^2 + 24 η^2 μ1^2 + 180 η^3 μ1^2 + 150 η^4 μ1^2 + 22 ηt μ1^2 +
    104 η ηt μ1^2 + 48 η^2 ηt μ1^2 + 24 η^3 ηt μ1^2 + 32 η μ2 + 228 η^2 μ2 +
    204 η^3 μ2 - 10 ηt μ2 - 27 η ηt μ2 - 24 η^2 ηt μ2 + 56 η μ1 μ2 +
    12 η^2 μ1 μ2 - 204 η^3 μ1 μ2 - 240 η^4 μ1 μ2 + 38 ηt μ1 μ2 +
    117 η ηt μ1 μ2 + 192 η^2 ηt μ1 μ2 + 120 η^3 ηt μ1 μ2 + w^4 (-1 + η)^4
     (12 η^3 (1 + μ1) - 12 η^2 (-1 + ηt - 5 μ1 + ηt μ1 - 4 μ1^2 + 3 μ1 μ2) +
       2 × (5 + 8 μ1 + 3 μ1^2 + 11 μ2 + 5 μ1 μ2) +
       ηt (-12 - 22 μ1 + 38 μ1^2 + 5 μ2 + 17 μ1 μ2) + 2 η
        (16 + 37 μ1 + 21 μ1^2 + 33 μ2 - 27 μ1 μ2 + 6 ηt (-1 - μ1 + 3 μ1 μ2))) -
    w^3 (-1 + η)^3 (40 η^4 (1 + μ1) + 2 × (20 + 31 μ1 + 5 μ1^2 + 30 μ2 + 6 μ1 μ2) -
       4 η^3 (-21 - 61 μ1 - 40 μ1^2 + 10 ηt (1 + μ1) + 36 μ1 μ2) +
       ηt (-66 - 130 μ1 + 128 μ1^2 + μ2 + 97 μ1 μ2) +
       3 η (62 + 40 μ1^2 + 36 ηt μ1^2 + 2 μ1 (63 - 34 μ2) + 112 μ2 -
           9 ηt (4 + μ2) + ηt μ1 (-64 + 87 μ2)) + 12 η^2 (14 + 43 μ1 +
           23 μ1^2 + 22 μ2 - 29 μ1 μ2 + ηt (-7 - 7 μ1 + 12 μ1 μ2))) +
    w^2 (-1 + η)^2 (46 + 58 μ1 + 30 η^5 (1 + μ1) + 50 μ2 + 14 μ1 μ2 +
       ηt (-124 - 224 μ1 + 164 μ1^2 - 23 μ2 + 181 μ1 μ2) -
       10 η^4 (3 ηt (1 + μ1) - 4 × (4 + 7 μ1 + 3 μ1^2 - 3 μ1 μ2)) +
       4 η^3 (70 + 255 μ1 + 125 μ1^2 + 55 μ2 - 161 μ1 μ2 +
           10 ηt (-4 - 4 μ1 + 3 μ1 μ2)) + 12 η^2 (38 + 106 μ1 + 38 μ1^2 +
           65 μ2 - 61 μ1 μ2 + ηt (-15 - 23 μ1 + 4 μ1^2 - 2 μ2 + 40 μ1 μ2)) +
       η (2 × (155 + 278 μ1 + 51 μ1^2 + 249 μ2 - 69 μ1 μ2) +
           3 ηt (-80 - 164 μ1 + 108 μ1^2 - 27 μ2 + 177 μ1 μ2))) -
    w (-1 + η) × (90 η^5 (1 + μ1) - 4 × (1 + μ1) × (-5 + μ1 - 3 μ2) +
       10 η^4 (20 + 65 μ1 + 27 μ1^2 - 9 ηt (1 + μ1) - 36 μ1 μ2) +
       ηt (-100 - 148 μ1 + 96 μ1^2 - 29 μ2 + 139 μ1 μ2) +
       12 η^2 (34 + 85 μ1 + 21 μ1^2 + 62 μ2 - 34 μ1 μ2 + ηt
            (-11 - 27 μ1 + 8 μ1^2 - 4 μ2 + 44 μ1 μ2)) + 4 η^3 (63 + 313 μ1 + 130
            μ1^2 + 106 μ2 - 176 μ1 μ2 + ηt (-50 - 44 μ1 + 6 μ1^2 + 60 μ1 μ2)) +
       η (4 × (54 + 75 μ1 + 3 μ1^2 + 65 μ2 + 17 μ1 μ2) + ηt
            (-204 - 460 μ1 + 320 μ1^2 - 81 μ2 + 423 μ1 μ2)))) +
  (-1 + ηt) θl (-10 - 60 η - 60 η^2 + 10 θp + 30 η θp - 36 η^2 θp -
    20 η^3 θp + 60 η^4 θp - 8 μ1 - 64 η μ1 - 164 η^2 μ1 - 80 η^3 μ1 +
    16 η^4 μ1 + 8 θp μ1 + 56 η θp μ1 + 18 η^2 θp μ1 - 192 η^3 θp μ1 -
    170 η^4 θp μ1 + 2 μ1^2 - 4 η μ1^2 + 28 η^2 μ1^2 + 16 η^3 μ1^2 +
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16 η^4 μ1^2 - 2 θp μ1^2 - 10 η θp μ1^2 - 18 η^2 θp μ1^2 - 52 η^3 θp μ1^2 -
50 η^4 θp μ1^2 - 5 μ2 - 20 η μ2 - 15 η^2 μ2 + 10 θp μ2 + 44 η θp μ2 -
6 η^2 θp μ2 - 72 η^3 θp μ2 - 20 η^4 θp μ2 + 19 μ1 μ2 + 76 η μ1 μ2 +
57 η^2 μ1 μ2 - 14 θp μ1 μ2 - 112 η θp μ1 μ2 - 186 η^2 θp μ1 μ2 +
100 η^4 θp μ1 μ2 + 2 w^4 (-1 + η)^4 (μ1^2 + 5 μ1 (-2 + μ2) +
    5 × (-1 + μ2) + 5 η (-2 + 4 μ1^2 + μ1 (-4 + μ2) + μ2)) -
5 θp Φ1 - 30 η θp Φ1 - 30 η^2 θp Φ1 - 4 θp μ1 Φ1 - 50 η θp μ1 Φ1 -
129 η^2 θp μ1 Φ1 - 96 η^3 θp μ1 Φ1 - 10 η^4 θp μ1 Φ1 + θp μ1^2 Φ1 -
2 η θp μ1^2 Φ1 - 27 η^2 θp μ1^2 Φ1 - 36 η^3 θp μ1^2 Φ1 - 10 η^4 θp μ1^2 Φ1 -
5 θp μ2 Φ1 - 30 η θp μ2 Φ1 - 30 η^2 θp μ2 Φ1 - 5 θp μ1 μ2 Φ1 -
30 η θp μ1 μ2 Φ1 - 30 η^2 θp μ1 μ2 Φ1 + 5 θp Φ2 + 30 η θp Φ2 +
30 η^2 θp Φ2 + 4 θp μ1 Φ2 + 40 η θp μ1 Φ2 + 87 η^2 θp μ1 Φ2 +
44 η^3 θp μ1 Φ2 - 10 η^4 θp μ1 Φ2 - θp μ1^2 Φ2 - 8 η θp μ1^2 Φ2 -
15 η^2 θp μ1^2 Φ2 - 16 η^3 θp μ1^2 Φ2 - 10 η^4 θp μ1^2 Φ2 + 5 θp μ2 Φ2 +
30 η θp μ2 Φ2 + 30 η^2 θp μ2 Φ2 - 7 θp μ1 μ2 Φ2 - 6 η θp μ1 μ2 Φ2 +
102 η^2 θp μ1 μ2 Φ2 + 120 η^3 θp μ1 μ2 Φ2 - w^3 (-1 + η)^3 (8 μ1^2 +
    3 η^2 (12 μ1^2 + μ1 (-52 + μ2 (19 - 10 θp (Φ1 - Φ2)) - 22 θp (Φ1 - Φ2)) -
        5 × (4 + μ2 + 2 θp (Φ1 - Φ2) + 2 θp μ2 (Φ1 - Φ2))) + 2 η
     (46 μ1^2 + μ1 (-128 + μ2 (53 - 15 θp (Φ1 - Φ2)) - 33 θp (Φ1 - Φ2)) -
        5 × (12 - μ2 + 3 θp (Φ1 - Φ2) + 3 θp μ2 (Φ1 - Φ2))) -
    5 × (8 + μ2 (-5 + θp (Φ1 - Φ2)) + θp (Φ1 - Φ2)) +
    μ1 (-68 - 11 θp (Φ1 - Φ2) + μ2 (49 - 5 θp Φ1 + 5 θp Φ2))) -
w^2 (-1 + η)^2 (-3 × (4 μ1^2 + 5 × (-4 + μ2) + μ1 (-28 + 29 μ2)) -
    θp (-((1 + μ2) × (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
        26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)) +
    3 η (80 + 152 μ1 - 20 μ1^2 + 10 μ2 - 86 μ1 μ2 + θp
          (μ1 (-26 + 61 Φ1 + 6 μ2 (9 + 5 Φ1 - 3 Φ2) - 57 Φ2) +
            6 × (1 + μ2) × (-3 + 5 Φ1 - 5 Φ2) + μ1^2 (4 + Φ1 + 3 Φ2))) +
    3 η^2 (60 + 156 μ1 - 36 μ1^2 + 15 μ2 - 57 μ1 μ2 + 2 θp
          (μ1 (26 + 44 Φ1 + 3 μ2 (2 + 5 Φ1 - 9 Φ2) - 36 Φ2) +
            3 × (1 + μ2) × (2 + 5 Φ1 - 5 Φ2) + μ1^2 (8 + 5 Φ1 + 3 Φ2))) +
    2 η^3 (-8 × (-5 + μ1) μ1 + 5 θp (10 × (1 + μ2) + μ1^2
              (4 + 3 Φ1 + Φ2) + μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)))) +
w (-1 + η) × (40 + 44 μ1 - 8 μ1^2 + 5 μ2 - 67 μ1 μ2 + 2 η^4
     (10 θp μ2 + μ1^2 (-8 + 5 θp (5 + Φ1 + Φ2)) +
        μ1 (-8 + 5 θp (23 - 10 μ2 + Φ1 + Φ2))) + θp (3 μ2
          (-8 + 5 Φ1 - 5 Φ2) + 5 × (-4 + 3 Φ1 - 3 Φ2) + μ1^2 (2 - 2 Φ1 + 2 Φ2) +
        μ1 (-30 + 19 Φ1 - 19 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2))) +
    η (-4 μ1^2 + μ1 (304 - 238 μ2) + 50 × (4 + μ2) + θp (-84 + 90 Φ1 +
            μ1 (-134 + 167 Φ1 + 2 μ2 (137 + 45 Φ1 - 9 Φ2) - 145 Φ2) +
            μ2 (-98 + 90 Φ1 - 90 Φ2) - 90 Φ2 + μ1^2 (22 + 5 Φ1 + 17 Φ2))) +
    η^2 (-100 μ1^2 + μ1 (476 - 171 μ2) + 45 × (4 + μ2) + 3 θp (8 + 30
              Φ1 + μ1 (30 + 109 Φ1 + μ2 (74 + 30 Φ1 - 78 Φ2) - 79 Φ2) + 2 μ2
              (7 + 15 Φ1 - 15 Φ2) - 30 Φ2 + μ1^2 (19 Φ1 + 11 × (2 + Φ2))) +
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                2 η^3 (-16 × (-5 + μ1) μ1 + θp (60 + 86 μ2 + μ1^2 (46 + 33 Φ1 + 13 Φ2) +
                      μ1 (226 + 93 Φ1 - 47 Φ2 - 10 μ2 (7 + 12 Φ2)))))))) +
x^5 (-1 + η)^5 (-4 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 (5 + w (-1 + η) ×
        (-5 + μ1) - μ1 - η (1 + μ1)) +
    θp (2 - 18 η + 40 η^2 - 24 η^3 - 8 ηt - 16 η ηt + 24 η^2 ηt - 2 θl +
        24 η θl + 2 ηt θl - 24 η ηt θl + 44 μ1 + 72 η μ1 - 92 η^2 μ1 -
        24 η^3 μ1 - 8 ηt μ1 - 16 η ηt μ1 + 24 η^2 ηt μ1 - 18 θl μ1 -
        62 η θl μ1 + 18 ηt θl μ1 + 62 η ηt θl μ1 + 18 μ1^2 +
        42 η μ1^2 - 60 η^2 μ1^2 - 4 θl μ1^2 - 14 η θl μ1^2 + 4 ηt θl μ1^2 +
        14 η ηt θl μ1^2 + 4 w^3 (-1 + η)^4 (1 + μ1) (η - ηt + 4 μ1) +
        18 μ2 - 18 η μ2 - 6 θl μ2 - 2 η θl μ2 + 6 ηt θl μ2 +
        2 η ηt θl μ2 + 6 μ1 μ2 - 30 η μ1 μ2 + 24 η^2 μ1 μ2 + 12 ηt μ1 μ2 -
        12 η ηt μ1 μ2 - 6 θl μ1 μ2 + 10 η θl μ1 μ2 + 6 ηt θl μ1 μ2 -
        10 η ηt θl μ1 μ2 - 9 θl μ1 Φ1 - η θl μ1 Φ1 + 9 ηt θl μ1 Φ1 +
        η ηt θl μ1 Φ1 - 3 θl μ1^2 Φ1 - η θl μ1^2 Φ1 + 3 ηt θl μ1^2 Φ1 +
        η ηt θl μ1^2 Φ1 + 5 θl μ1 Φ2 - η θl μ1 Φ2 - 5 ηt θl μ1 Φ2 +
        η ηt θl μ1 Φ2 - θl μ1^2 Φ2 - η θl μ1^2 Φ2 + ηt θl μ1^2 Φ2 +
        η ηt θl μ1^2 Φ2 + 12 θl μ1 μ2 Φ2 - 12 ηt θl μ1 μ2 Φ2 -
        w^2 (-1 + η)^2 (-10 + 10 θl - 84 μ1 + 26 θl μ1 - 50 μ1^2 + 4 θl μ1^2 +
            12 η^3 (1 + μ1) - 22 μ2 + 10 θl μ2 + 14 μ1 μ2 - 14 θl μ1 μ2 +
            4 η^2 (1 + 13 μ1 + 12 μ1^2 - 3 ηt (1 + μ1) - 3 μ1 μ2) +
            2 η (-3 + 10 μ1 + μ1^2 + 11 μ2 - μ1 μ2 + ηt (-2 - 2 μ1 + 6 μ1 μ2)) +
            9 θl μ1 Φ1 + 3 θl μ1^2 Φ1 - 5 θl μ1 Φ2 + θl μ1^2 Φ2 - 12 θl μ1 μ2 Φ2 -
            ηt (-16 + 10 θl (1 + μ2) + 4 μ1 (-4 + 3 μ2) + θl μ1^2 (4 + 3 Φ1 + Φ2) +
                θl μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)))) + w (-1 + η) ×
          (36 η^3 (1 + μ1) - 4 η^2 (4 - 27 μ1^2 + 9 ηt (1 + μ1) + μ1 (-41 + 9 μ2)) +
            η (-8 + 40 μ2 + 2 θl μ2 + μ1^2 (-56 + θl (14 + Φ1 + Φ2)) +
                μ1 (-88 + 28 μ2 + θl (86 - 10 μ2 + Φ1 + Φ2)) -
                ηt (-8 μ1 (2 + 3 μ2) + 2 × (-8 + θl μ2) +
                    θl μ1^2 (14 + Φ1 + Φ2) + θl μ1 (86 - 10 μ2 + Φ1 + Φ2))) -
            2 × (6 + 56 μ1 + 26 μ1^2 + 20 μ2 - 4 μ1 μ2 - θl (6 + 8 μ2 +
                    μ1^2 (4 + 3 Φ1 + Φ2) + μ1 (22 + 9 Φ1 - 5 Φ2 - 4 μ2 (1 + 3 Φ2))) +
                ηt (2 × (-5 + μ1 (-5 + 6 μ2)) + θl (6 + 8 μ2 + μ1^2 (4 + 3 Φ1 + Φ2) +
                        μ1 (22 + 9 Φ1 - 5 Φ2 - 4 μ2 (1 + 3 Φ2)))))))) -
x (-1 + η) × (4 w^2 (3 - 5 w + 2 w^2) η^9 θp (1 + μ1) - 4 w η^8 θp (9 × (1 + μ1) +
        w^3 (7 - μ1 - 8 μ1^2 + 2 ηt (1 + μ1) + 9 μ1 μ2) +
        w (-11 - 23 μ1 - 12 μ1^2 + 3 ηt (1 + μ1) + 15 μ1 μ2) -
        w^2 (6 - 14 μ1 - 20 μ1^2 + 5 ηt (1 + μ1) + 24 μ1 μ2)) -
    (1 + w)^3 (5 w θl (1 + μ1) μ2 - 5 w ηt θl (1 + μ1) μ2 +
        ηt θp (2 μ1^2 + 2 w (7 μ1^2 + 5 μ1 (-2 + μ2) + 5 × (-1 + μ2)) -
            5 × (2 + μ2) + μ1 (-8 + 19 μ2))) + 2 η^7 θp
      (12 × (1 + μ1) + 2 w (-7 - 52 μ1 - 27 μ1^2 + 9 ηt (1 + μ1) + 45 μ1 μ2) -
        2 w^3 (6 - 16 μ1 - 34 μ1^2 + 44 μ2 + 23 μ1 μ2 + 6 ηt (1 + μ1 + 4 μ1 μ2)) +
        w^4 (27 - 32 μ1 - 59 μ1^2 + 33 μ2 + 57 μ1 μ2 + 2 ηt (7 + 7 μ1 + 9 μ1 μ2)) +
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    w^2 (-17 + 96 μ1 + 53 μ1^2 + 55 μ2 - 113 μ1 μ2 +
        ηt (-22 - 22 μ1 + 30 μ1 μ2)) + η^2 (θp (-60 + (12 - 56 ηt) μ1^2 -
        28 μ2 + 7 ηt μ2 - μ1 (48 - 88 ηt + 76 μ2 + 41 ηt μ2) -
        2 w (3 ηt (26 + 14 μ1 + 8 μ1^2 + 5 μ2 - 11 μ1 μ2) + 2 × (34 + 59 μ1 +
              7 μ1^2 + 52 μ2 + 10 μ1 μ2)) + 2 w^4 (33 + 42 μ1 + 9 μ1^2 + 77 μ2 +
            83 μ1 μ2 + ηt (-4 - 4 μ1 + 90 μ1^2 - 25 μ2 + 17 μ1 μ2)) +
        2 w^2 (-19 - 106 μ1 - 51 μ1^2 - 99 μ2 + 123 μ1 μ2 +
            3 ηt (-54 - 100 μ1 + 44 μ1^2 - 17 μ2 + 49 μ1 μ2)) +
        w^3 (8 × (16 + 14 μ1 - 5 μ1^2 + 18 μ2 + 42 μ1 μ2) +
            ηt (-180 - 440 μ1 + 436 μ1^2 - 115 μ2 + 221 μ1 μ2))) +
    (-1 + ηt) θl (w^3 (60 + 100 μ1^2 + μ1 (76 - 49 μ2) - 25 μ2) +
        w^4 (30 + 60 μ1 + 54 μ1^2 - 5 μ2 - 5 μ1 μ2) - 2 × (7 μ1^2 + μ1 (16 - 19 μ2) +
            5 × (3 + μ2)) - 4 w (15 + 27 μ1 + 9 μ1^2 + 5 μ2 - 13 μ1 μ2 + θp
              (-11 + 15 Φ1 + μ1 (-19 + 32 Φ1 + μ2 (47 + 15 Φ1 - 9 Φ2) - 27 Φ2) +
                μ2 (-13 + 15 Φ1 - 15 Φ2) - 15 Φ2 + μ1^2 (4 + 2 Φ1 + 3 Φ2))) -
        θp (μ2 (-46 + 30 Φ1 - 30 Φ2) + 30 × (-1 + Φ1 - Φ2) +
            μ1^2 (8 + Φ1 + 7 Φ2) + μ1 (-58 + 49 Φ1 - 41 Φ2 + 2 μ2 (61 + 15 Φ1 +
                  3 Φ2))) - w^2 (6 × (-4 μ1^2 + 5 μ2 + 5 μ1 (2 + μ2)) +
            θp (μ1 (26 + 79 Φ1 + μ2 (26 + 30 Φ1 - 42 Φ2) - 67 Φ2) +
                2 × (1 + μ2) × (1 + 15 Φ1 - 15 Φ2) + μ1^2 (12 + 7 Φ1 + 5 Φ2)))))) -
η (θp (ηt (-50 - 56 μ1 + 18 μ1^2 - 15 μ2 + 57 μ1 μ2) + 2 w^3
          (ηt (14 + 6 μ1 + 10 μ1^2 - 49 μ2 - μ1 μ2) + 2 × (20 + 31 μ1 + 5 μ1^2 +
                30 μ2 + 6 μ1 μ2)) + w^4 (4 × (5 + 8 μ1 + 3 μ1^2 + 11 μ2 + 5 μ1 μ2) -
            2 ηt (-13 - 28 μ1 + 3 μ1^2 + 20 μ2 + 8 μ1 μ2)) +
        4 w (-2 × (1 + μ1) × (-5 + μ1 - 3 μ2) + ηt (-30 - 52 μ1 + 17 μ1^2 -
                12 μ2 + 36 μ1 μ2)) + w^2 (4 × (23 + 29 μ1 + 25 μ2 + 7 μ1 μ2) +
            ηt (-68 - 196 μ1 + 76 μ1^2 - 91 μ2 + 101 μ1 μ2))) + (-1 + ηt)
      θl (10 + 8 μ1 - 2 μ1^2 + 5 μ2 - 19 μ1 μ2 + 10 w^4 (1 + μ1) × (1 + μ1 + μ2) +
        2 w^3 (14 μ1^2 + 5 × (4 + μ2 (2 + θp (Φ1 - Φ2)) + θp (Φ1 - Φ2)) +
            μ1 (34 + μ2 (-2 + 5 θp (Φ1 - Φ2)) + 11 θp (Φ1 - Φ2))) -
        2 θp μ1^2 (-2 + Φ1 - Φ2) + 10 θp (1 + μ2) × (-2 + Φ1 - Φ2) +
        2 θp μ1 (5 μ2 Φ1 + 4 × (-2 + Φ1 - Φ2) + 7 μ2 (2 + Φ2)) +
        w^2 (3 × (8 μ1^2 + μ1 (28 - 19 μ2) + 5 × (4 + μ2)) -
            2 θp (-((1 + μ2) × (-14 + 15 Φ1 - 15 Φ2)) + μ1^2 (Φ1 - Φ2) +
                26 μ1 (1 - Φ1 + Φ2) + μ1 μ2 (-34 - 15 Φ1 + 3 Φ2)) +
        w (40 + 44 μ1 + 4 μ1^2 + 10 μ2 - 62 μ1 μ2 + θp (6 μ2 (-8 + 5 Φ1 -
                  5 Φ2) + 10 × (-4 + 3 Φ1 - 3 Φ2) + μ1^2 (4 - 4 Φ1 + 4 Φ2) +
                2 μ1 (-30 + 19 Φ1 - 19 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2))))))) +
η^4 (78 θp + 24 ηt θp + 10 θl θp - 10 ηt θl θp + 20 θl μ1 - 20 ηt θl μ1 -
    68 θp μ1 - 56 ηt θp μ1 + 98 θl θp μ1 - 98 ηt θl θp μ1 -
    4 θl μ1^2 + 4 ηt θl μ1^2 - 74 θp μ1^2 + 16 ηt θp μ1^2 +
    28 θl θp μ1^2 - 28 ηt θl θp μ1^2 + 46 θp μ2 - 16 ηt θp μ2 +
    38 θl θp μ2 - 38 ηt θl θp μ2 + 154 θp μ1 μ2 +
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68 ηt θp μ1 μ2 - 10 θl θp μ1 μ2 + 10 ηt θl θp μ1 μ2 +
w^4 ((-1 + ηt) θl (124 μ1^2 - 5 × (4 + μ2) - 5 μ1 (8 + μ2)) +
    2 θp (-2 × (22 + 57 μ1 + 35 μ1^2 + 55 μ2 - 170 μ1 μ2) +
        5 ηt (-11 - 26 μ1 + 57 μ1^2 + 5 μ2 - 7 μ1 μ2))) + 49 θl θp μ1 Φ1 -
49 ηt θl θp μ1 Φ1 + 19 θl θp μ1^2 Φ1 - 19 ηt θl θp μ1^2 Φ1 -
w^3 (θp (8 × (47 - 2 μ1^2 + μ1 (63 - 58 μ2) + 104 μ2) +
        ηt (44 - 236 μ1^2 - 145 μ2 + μ1 (24 + 455 μ2))) - (-1 + ηt) θl
      (64 μ1^2 + μ1 (-160 + μ2 (53 - 20 θp (Φ1 - Φ2)) - 44 θp (Φ1 - Φ2)) -
        5 × (16 - μ2 + 4 θp (Φ1 - Φ2) + 4 θp μ2 (Φ1 - Φ2)))) -
21 θl θp μ1 Φ2 + 21 ηt θl θp μ1 Φ2 + 9 θl θp μ1^2 Φ2 - 9 ηt θl
  θp μ1^2 Φ2 - 60 θl θp μ1 μ2 Φ2 + 60 ηt θl θp μ1 μ2 Φ2 +
w (θp (4 × (49 + 16 μ1^2 + μ1 (107 - 68 μ2) + 130 μ2) +
        ηt (128 - 132 μ1^2 + 17 μ2 + μ1 (116 + 161 μ2))) +
    (-1 + ηt) θl (60 + 120 μ1 + 15 μ2 - 57 μ1 μ2 + θp (-44 + 60 Φ1 +
            μ1 (-170 + 123 Φ1 + μ2 (238 + 60 Φ1 - 36 Φ2) - 113 Φ2) +
            μ2 (-62 + 60 Φ1 - 60 Φ2) - 60 Φ2 + μ1^2 (-6 + 3 Φ1 + 7 Φ2)))) +
w^2 (-((-1 + ηt) θl (44 μ1^2 - 15 μ2 - μ1 (64 + 15 μ2))) +
    θp (-48 + 500 μ1 + 356 μ1^2 + 56 μ2 - 832 μ1 μ2 -
        2 θl (μ1 (78 + 62 Φ1 + μ2 (-22 + 15 Φ1 - 51 Φ2) - 46 Φ2) +
            (1 + μ2) × (26 + 15 Φ1 - 15 Φ2) + μ1^2 (16 + 11 Φ1 + 5 Φ2)) +
        ηt (192 + 556 μ1 - 440 μ1^2 + 149 μ2 - 331 μ1 μ2 + 2 θl (μ1 (78 +
                62 Φ1 + μ2 (-22 + 15 Φ1 - 51 Φ2) - 46 Φ2) + (1 + μ2) ×
              (26 + 15 Φ1 - 15 Φ2) + μ1^2 (16 + 11 Φ1 + 5 Φ2))))) +
η^3 (θp (-4 × (11 + 7 μ1^2 + μ1 (30 - 17 μ2) + 31 μ2) + ηt (44 μ1^2 -
        11 × (4 + μ2) - μ1 (72 + 11 μ2)) -
    4 w^3 (-40 - 108 μ1 - 44 μ1^2 - 112 μ2 + 203 μ1 μ2 +
        ηt (-64 - 144 μ1 + 166 μ1^2 + 5 μ2 + 5 μ1 μ2)) - 2 w^4 (21 - 8 μ1 - 29
         μ1^2 + 55 μ2 + 247 μ1 μ2 + ηt (-44 - 94 μ1 + 250 μ1^2 + 30 μ1 μ2)) +
    4 w (-2 × (-14 + 15 μ1 + 17 μ1^2 + μ2 - 59 μ1 μ2) +
        ηt (-30 - 104 μ1 + 79 μ1^2 - 18 μ2 + 54 μ1 μ2)) +
    2 w^2 (171 + 232 μ1 + μ1^2 + 337 μ2 + 7 μ1 μ2 + ηt
         (42 - 16 μ1 + 56 μ1^2 - 37 μ2 + 137 μ1 μ2))) - (-1 + ηt) θl
  (20 + 56 μ1 + 4 w^4 (5 + 29 μ1^2 - 5 μ1 (-2 + μ2) - 5 μ2) + 5 μ2 -
    19 μ1 μ2 + θp (μ1 (-14 + 85 Φ1 + 2 μ2 (67 + 10 Φ1 - 34 Φ2) - 59 Φ2) +
        μ1^2 (10 + 17 Φ1 + 9 Φ2) + 2 × (12 + μ2 + 10 Φ1 + 10 μ2 Φ1 - 10 Φ2 -
            10 μ2 Φ2)) + 8 w^3 (16 μ1^2 - 5 × (1 + μ2) × (1 + θp (Φ1 - Φ2)) +
        μ1 (-16 + μ2 - 11 θp Φ1 - 5 θp μ2 Φ1 + 11 θp Φ2 + 5 θp μ2 Φ2)) +
    2 w^2 (-3 × (6 μ1^2 + μ1 (36 - 19 μ2) + 5 × (4 + μ2)) +
        θp (-((1 + μ2) × (-52 + 45 Φ1 - 45 Φ2)) + μ1^2 (4 + 6 Φ1 - 2 Φ2) -
            μ1 (-104 + 69 Φ1 - 73 Φ2 + μ2 (116 + 45 Φ1 + 3 Φ2)))) +
    w (-48 μ1^2 - 10 × (4 + μ2) + μ1 (8 + 62 μ2) + θp (100 - 30 Φ1 -
            6 μ2 (-21 + 5 Φ1 - 5 Φ2) + 30 Φ2 + μ1^2 (22 + 33 Φ1 + 5 Φ2) -
            μ1 (-194 - 51 Φ1 + 13 Φ2 + 6 μ2 (21 + 5 Φ1 + 23 Φ2))))) +
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η^5 (4 × (-1 + ηt) θl μ1 (1 + μ1) - 2 w^4 ((-1 + ηt) θl (33 μ1^2 + 5 μ1
            (-6 + μ2) + 5 × (-3 + μ2)) + θp (-20 × (4 + μ1^2 + μ1 (5 - 10 μ2) +
              11 μ2) + ηt (153 μ1^2 + 5 × (-7 + 4 μ2) - 20 μ1 (4 + 5 μ2)))) +
    θp (2 × (5 + 15 μ1^2 + μ1 (44 - 13 μ2) + 53 μ2) + 4 ηt (-4 + 4 μ1^2 +
          15 μ1 μ2) + θl (-24 + 10 μ2 + 5 μ1 (14 - 10 μ2 + Φ1 + Φ2) +
          μ1^2 (22 + 5 Φ1 + 5 Φ2)) - ηt θl (-24 + 10 μ2 +
          5 μ1 (14 - 10 μ2 + Φ1 + Φ2) + μ1^2 (22 + 5 Φ1 + 5 Φ2)) -
    2 w^3 (2 × (-1 + ηt) θl (μ1^2 - μ1 (-7 + μ2) + 5 μ2) + θp
        (-62 + 162 μ1^2 - 84 μ2 - 15 θl Φ1 - 15 θl μ2 Φ1 +
          μ1 (112 - 3 μ2 (64 + 5 θl (Φ1 - Φ2)) - 33 θl (Φ1 - Φ2)) +
          15 θl Φ2 + 15 θl μ2 Φ2 + ηt (22 - 70 μ1^2 + 15 θl Φ1 +
              5 μ2 (11 + 3 θl (Φ1 - Φ2)) + μ1 (126 + μ2 (-137 +
                    15 θl (Φ1 - Φ2)) + 33 θl (Φ1 - Φ2)) - 15 θl Φ2))) +
    w^2 (3 θp (-4 × (19 + 9 μ1^2 + μ1 (46 - 36 μ2) + 61 μ2) + ηt
            (-36 + 52 μ1^2 - 11 μ2 - μ1 (56 + 83 μ2))) +
        (-1 + ηt) θl (4 μ1^2 - 15 × (4 + μ2) + μ1 (-116 + 57 μ2) +
          2 θp (-2 × (1 + μ2) × (-19 + 15 Φ1 - 15 Φ2) + μ1^2 (4 + 5 Φ1 - Φ2) -
              μ1 (-78 + 43 Φ1 - 47 Φ2 + μ2 (82 + 30 Φ1 + 6 Φ2)))) +
    w (-4 × (-1 + ηt) θl (-11 + μ1) μ1 + θp (4 × (-21 + 61 μ1^2 +
              μ1 (82 - 103 μ2) - 16 μ2) - θl (60 + 78 μ2 + μ1^2 (26 + 29 Φ1 +
                  9 Φ2) + μ1 (134 + 89 Φ1 - 51 Φ2 - 30 μ2 (1 + 4 Φ2))) +
          ηt (-4 × (19 + 8 μ1^2 - 8 μ2 + 7 μ1 (-3 + 4 μ2)) +
              θl (60 + 78 μ2 + μ1^2 (26 + 29 Φ1 + 9 Φ2) +
                  μ1 (134 + 89 Φ1 - 51 Φ2 - 30 μ2 (1 + 4 Φ2)))))) +
η^6 (-4 θp (2 - 15 μ1^2 + 6 ηt (1 + μ1) + μ1 (-31 + 30 μ2)) +
    w^4 ((-1 + ηt) θl (14 μ1^2 + 5 μ1 (-4 + μ2) + 5 × (-2 + μ2)) +
        2 θp (-55 + 6 μ1 + 61 μ1^2 - 143 μ2 - 5 μ1 μ2 +
          ηt (-22 - 32 μ1 + 32 μ1^2 + 5 μ2 - 73 μ1 μ2))) +
    w^3 (θp (8 × (8 + 17 μ1^2 + μ1 (40 - 44 μ2) + 46 μ2) + ηt
            (4 - 84 μ1^2 + 27 μ2 + μ1 (88 + 123 μ2))) - (-1 + ηt) θl
        (4 μ1^2 + μ1 (-52 + μ2 (19 - 20 θp (Φ1 - Φ2)) - 44 θp (Φ1 - Φ2)) -
          5 × (4 + μ2 + 4 θp (Φ1 - Φ2) + 4 θp μ2 (Φ1 - Φ2))) +
    w (-4 × (-1 + ηt) θl μ1 (1 + μ1) + θp (16 - 2 × (108 + 5 θl) μ2 +
          μ1 (-124 + 96 μ2 + θl (-94 + 50 μ2 - 5 Φ1 - 5 Φ2)) -
          μ1^2 (44 + θl (22 + 5 Φ1 + 5 Φ2)) +
          ηt (28 + 10 θl μ2 + μ1^2 (-16 + θl (22 + 5 Φ1 + 5 Φ2)) +
              μ1 (12 - 120 μ2 + θl (94 - 50 μ2 + 5 Φ1 + 5 Φ2)))) +
    w^2 (4 × (-1 + ηt) θl (-5 + μ1) μ1 + θp (42 - 380 μ1 - 302 μ1^2 +
          190 μ2 + 454 μ1 μ2 + 5 θl (10 × (1 + μ2) + μ1^2 (4 + 3 Φ1 + Φ2) +
              μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2))) +
          ηt (4 × (21 + 8 μ1^2 - 4 μ2 + 5 μ1 (1 + 7 μ2)) -
              5 θl (10 × (1 + μ2) + μ1^2 (4 + 3 Φ1 + Φ2) +
                  μ1 (26 + 9 Φ1 - 5 Φ2 - 2 μ2 (7 + 6 Φ2)))))))))) /
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(96 (-1 + w (-1 + η))^3 (w (-1 + η) + x (-1 + η) - η)^2 (x + η - x η)^2 (1 +
      x +
      η -
      x
       η)^2 (-1 + ηt) θl θp))

δgs1 = -((cv cσ (x (-1 + η) - η) (-1 + η) (1 + x + η - x η)^2
      ((x + η - x η)^4 (-1 + ηt) θl θp (2 x (-1 + η) × (1 + μ1 - 32 μ2) -
          2 η (1 + μ1 - 32 μ2) - (11 + 11 μ1 + 8 μ2) × (2 + Φ1 + Φ2)) +
        w^5 (-1 + η)^5 (x^2 (-1 + η)^2 (4 × (-1 + η) θp (-7 × (1 + μ1) + η (9 + 9 μ1 + 28 μ2) -
                ηt (9 + 9 μ1 + 28 μ2)) + (-1 + ηt) θl (-4 × (3 + 3 μ1 - 8 μ2) + θp
                 (64 + 17 Φ1 + μ1 (64 + 17 Φ1 - 3 Φ2) - 3 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2)))) +
          η θp (4 ηt (3 + 3 μ1 - 8 μ2) + 4 η^3 (9 + 9 μ1 + 28 μ2) - 4 η^2
              (4 × (4 + 4 μ1 + 7 μ2) + ηt (9 + 9 μ1 + 28 μ2)) + η
              (28 × (1 + μ1) + θl (-64 - 17 Φ1 + 3 Φ2 + μ1 (-64 - 17 Φ1 + 3 Φ2) +
                  8 μ2 (10 + 3 Φ1 + 3 Φ2)) + ηt (24 × (1 + μ1 + 6 μ2) + θl (64 + 17 Φ1 +
                     μ1 (64 + 17 Φ1 - 3 Φ2) - 3 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2))))) -
          2 x (-1 + η) × (2 ηt θp (7 + 7 μ1 + 4 μ2) + 4 η^3 θp (9 + 9 μ1 + 28 μ2) -
              4 η^2 θp (4 × (4 + 4 μ1 + 7 μ2) + ηt (9 + 9 μ1 + 28 μ2)) + η
               (2 θp (14 × (1 + μ1) + ηt (11 + 11 μ1 + 52 μ2)) +
                 (-1 + ηt) θl (2 × (1 + μ1 + 20 μ2) + θp (64 + 17 Φ1 +
                        μ1 (64 + 17 Φ1 - 3 Φ2) - 3 Φ2 - 8 μ2 (10 + 3 Φ1 + 3 Φ2))))) -
        w (x (-1 + η) - η) (-1 + η) × (4 x^4 (-1 + η)^4 θp (29 - 30 θl + 29 μ1 - 30
               θl μ1 + 72 μ2 - 40 θl μ2 + 3 η^2 (9 + 9 μ1 + 28 μ2) - η (56 + 56 μ1 + 156 μ2 -
                 2 θl (9 + 9 μ1 + 28 μ2) + ηt (1 + 2 θl) × (9 + 9 μ1 + 28 μ2)) + 4 θl
               μ2 Φ1 + ηt (9 + 9 μ1 + 28 μ2 + θl (30 + 30 μ1 + 40 μ2 - 4 μ2 Φ1))) -
          x^3 (-1 + η)^3 θp (48 η^3 (9 + 9 μ1 + 28 μ2) - 16 η^2 (56 + 56 μ1 + 156 μ2 -
                 2 θl (9 + 9 μ1 + 28 μ2) + ηt (1 + 2 θl) × (9 + 9 μ1 + 28 μ2)) + 16
               η (29 + 29 μ1 + 72 μ2 - 2 θl (15 + 15 μ1 + 20 μ2 - 2 μ2 Φ1) +
                 ηt (9 + 9 μ1 + 28 μ2 + θl (30 + 30 μ1 + 40 μ2 - 4 μ2 Φ1))) + 3 × (-1 + ηt)
               θl (24 + 11 Φ1 + 11 Φ2 + 8 μ2 (-6 + Φ1 + Φ2) + μ1 (24 + 11 Φ1 + 11 Φ2))) +
          η θp (4 ηt (7 + 7 μ1 + 4 μ2) + 12 η^5 (9 + 9 μ1 + 28 μ2) - 4 η^4 (56 + 56 μ1 +
                 156 μ2 - 2 θl (9 + 9 μ1 + 28 μ2) + ηt (1 + 2 θl) × (9 + 9 μ1 + 28 μ2)) + 4
               η^3 (29 + 29 μ1 + 72 μ2 - 2 θl (15 + 15 μ1 + 20 μ2 - 2 μ2 Φ1) +
                 ηt (9 + 9 μ1 + 28 μ2 + θl (30 + 30 μ1 + 40 μ2 - 4 μ2 Φ1))) + 3 η^2 (-1 + ηt)
               θl (24 + 11 Φ1 + 11 Φ2 + 8 μ2 (-6 + Φ1 + Φ2) + μ1 (24 + 11 Φ1 + 11 Φ2)) + 4
               η (-θl (18 + 9 Φ1 + 4 Φ2 + 2 μ2 (6 + 3 Φ1 + Φ2) + μ1 (18 + 9 Φ1 + 4 Φ2)) +
                 ηt (-7 - 7 μ1 - 4 μ2 + θl (18 + 9 Φ1 + 4 Φ2 +
                        2 μ2 (6 + 3 Φ1 + Φ2) + μ1 (18 + 9 Φ1 + 4 Φ2))))) -
          x (-1 + η) × (48 η^5 θp (9 + 9 μ1 + 28 μ2) + 4 ηt θp (19 + 19 μ1 + 40 μ2) -
              16 η^4 θp (56 + 56 μ1 + 156 μ2 - 2 θl (9 + 9 μ1 + 28 μ2) +
                 ηt (1 + 2 θl) × (9 + 9 μ1 + 28 μ2)) + 16 η^3 θp
               (29 + 29 μ1 + 72 μ2 - 2 θl (15 + 15 μ1 + 20 μ2 - 2 μ2 Φ1) +
                 ηt (9 + 9 μ1 + 28 μ2 + θl (30 + 30 μ1 + 40 μ2 - 4 μ2 Φ1))) + 9
               η^2 (-1 + ηt) θl θp (24 + 11 Φ1 + 11 Φ2 + 8 μ2 (-6 + Φ1 + Φ2) +
                 μ1 (24 + 11 Φ1 + 11 Φ2)) + 4 η (-ηt θp (19 + 19 μ1 + 40 μ2) +
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            (-1 + ηt) θl (-3 - 3 μ1 + 8 μ2 + 2 θp (22 + 11 Φ1 + 6 Φ2 +
                  4 μ2 (6 + 3 Φ1 + 2 Φ2) + μ1 (22 + 11 Φ1 + 6 Φ2)))))) +
      x^2 (-1 + η)^2 (24 × (-1 + η) η^2 θp (-29 - 29 μ1 - 72 μ2 + 3 η
            (9 + 9 μ1 + 28 μ2) - ηt (9 + 9 μ1 + 28 μ2)) - (-1 + ηt)
          θl (60 + 60 μ1 + 112 μ2 + θp (48 η^3 (9 + 9 μ1 + 28 μ2) -
                48 η^2 (15 + 15 μ1 - 2 μ2 (-10 + Φ1)) - 4 × (26 + 13 Φ1 + 8 Φ2 +
                    2 μ2 (18 + 9 Φ1 + 7 Φ2) + μ1 (26 + 13 Φ1 + 8 Φ2)) - 9 η (24 + 11
                     Φ1 + 11 Φ2 + 8 μ2 (-6 + Φ1 + Φ2) + μ1 (24 + 11 Φ1 + 11 Φ2))))))) +
w^2 (-1 + η)^2 (2 x^5 (-1 + η)^5 θp (14 - 15 θl + 14 μ1 - 15 θl μ1 + 32 θl μ2 +
        2 η^2 (9 + 9 μ1 + 28 μ2) + 2 ηt (9 + 9 μ1 + 28 μ2) - 2 η (4 × (4 + 4 μ1 + 7 μ2) +
            ηt (9 + 9 μ1 + 28 μ2)) + 8 θl μ2 Φ1 + ηt θl (15 + 15 μ1 - 8 μ2 (4 + Φ1))) -
      x^4 (-1 + η)^4 θp (20 η^3 (9 + 9 μ1 + 28 μ2) - 4 η^2 (-1 - μ1 - 112 μ2 +
            5 ηt (9 + 9 μ1 + 28 μ2)) + η (8 ηt (9 + 9 μ1 + 28 μ2) -
            4 × (133 + 133 μ1 + 468 μ2) - 2 ηt θl (33 + 33 μ1 + 8 μ2 (62 + 5 Φ1)) +
            θl (66 + 66 μ1 + 16 μ2 (62 + 5 Φ1))) + 3 × (4 × (29 + 29 μ1 + 72 μ2) - θl
             (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + μ1 (142 + 11 Φ1 + 11 Φ2)) +
            ηt (4 × (9 + 9 μ1 + 28 μ2) + θl (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) +
                  11 Φ2 + μ1 (142 + 11 Φ1 + 11 Φ2))))) -
      η θp (4 ηt (3 + 3 μ1 - 8 μ2) + 4 η^6 (9 + 9 μ1 + 28 μ2) - 4 η^5
            (-65 - 65 μ1 - 224 μ2 + ηt (9 + 9 μ1 + 28 μ2)) - 2
            η^4 (322 + 322 μ1 + 936 μ2 + 4 ηt (9 + 9 μ1 + 28 μ2) -
              θl (93 + 93 μ1 + 8 μ2 (46 + Φ1)) + ηt θl (93 + 93 μ1 + 8 μ2 (46 + Φ1))) +
          η (θl (-34 - 17 Φ1 + 3 Φ2 + μ1 (-34 - 17 Φ1 + 3 Φ2) + 8 μ2 (2 + Φ1 + 3 Φ2)) +
              ηt (8 × (9 + 9 μ1 + 10 μ2) + θl (34 + 17 Φ1 + μ1 (34 + 17 Φ1 - 3 Φ2) -
                    3 Φ2 - 8 μ2 (2 + Φ1 + 3 Φ2)))) + 6 η^2
            (-θl (37 + 18 Φ1 + 8 Φ2 + 4 μ2 (-2 + 3 Φ1 + Φ2) + μ1 (37 + 18 Φ1 + 8 Φ2)) +
              ηt (-2 × (7 + 7 μ1 + 4 μ2) + θl (37 + 18 Φ1 + 8 Φ2 + 4 μ2 (-2 + 3 Φ1 + Φ2) +
                    μ1 (37 + 18 Φ1 + 8 Φ2)))) + 3 η^3 (4 × (29 + 29 μ1 + 72 μ2) - θl
             (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + μ1 (142 + 11 Φ1 + 11 Φ2)) +
              ηt (4 × (9 + 9 μ1 + 28 μ2) + θl (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) +
                    11 Φ2 + μ1 (142 + 11 Φ1 + 11 Φ2))))) +
      2 x^3 (-1 + η)^3 (4 × (-1 + η) η θp (5 η^2 (9 + 9 μ1 + 28 μ2) + η
              (127 + 127 μ1 + 504 μ2 - 5 ηt (9 + 9 μ1 + 28 μ2)) -
              6 × (29 + 29 μ1 + 72 μ2 + ηt (9 + 9 μ1 + 28 μ2))) - (-1 + ηt) θl
            (90 + 90 μ1 + 168 μ2 + θp (2 η^2 (141 + 141 μ1 + 8 μ2 (104 + 5 Φ1)) -
                  6 η (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 +
                      μ1 (142 + 11 Φ1 + 11 Φ2)) - 3 × (53 + 26 Φ1 + 16 Φ2 +
                      4 μ2 (10 + 9 Φ1 + 7 Φ2) + μ1 (53 + 26 Φ1 + 16 Φ2))))) +
      2 x (-1 + η) × (2 ηt θp (7 + 7 μ1 + 4 μ2) + 10 η^6 θp (9 + 9 μ1 + 28 μ2) +
        2 η^5 θp (-5 ηt (9 + 9 μ1 + 28 μ2) + 4 × (61 + 61 μ1 + 217 μ2)) - η^4
            θp (14 ηt (9 + 9 μ1 + 28 μ2) + 26 × (49 + 49 μ1 + 144 μ2) -
              θl (357 + 357 μ1 + 8 μ2 (188 + 5 Φ1)) + ηt θl
               (357 + 357 μ1 + 8 μ2 (188 + 5 Φ1))) + η (2 ηt θp (71 + 71 μ1 + 128 μ2) +
              (-1 + ηt) θl (2 × (1 + μ1 + 20 μ2) + θp (34 + 17 Φ1 +
                    μ1 (34 + 17 Φ1 - 3 Φ2) - 3 Φ2 - 8 μ2 (2 + Φ1 + 3 Φ2)))) + 6 η^3 θp
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(4 × (29 + 29 μ1 + 72 μ2) - θl (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) +
      11 Φ2 + μ1 (142 + 11 Φ1 + 11 Φ2)) + ηt (4 × (9 + 9 μ1 + 28 μ2) +
      θl (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + μ1
         (142 + 11 Φ1 + 11 Φ2)))) + 3 η^2 (-4 ηt θp (13 + 13 μ1 + 22 μ2) +
    (-1 + ηt) θl (-6 - 6 μ1 + 16 μ2 + θp (127 + 62 Φ1 + 32 Φ2 +
         12 μ2 (2 + 5 Φ1 + 3 Φ2) + μ1 (127 + 62 Φ1 + 32 Φ2))))) -
x^2 (-1 + η)^2 (4 × (-1 + η) θp (10 η^4 (9 + 9 μ1 + 28 μ2) - 3 ηt (19 +
      19 μ1 + 40 μ2) - 18 η^2 (29 + 29 μ1 + 72 μ2 + ηt (9 + 9 μ1 + 28 μ2)) +
    η^3 (-10 ηt (9 + 9 μ1 + 28 μ2) + 8 × (52 + 52 μ1 + 189 μ2))) - (-1 + ηt)
    θl (4 × (3 + 3 μ1 - 8 μ2) + 4 η^3 θp (249 + 249 μ1 + 8 μ2 (146 + 5 Φ1)) +
      θp (-34 - 17 Φ1 + 3 Φ2 + μ1 (-34 - 17 Φ1 + 3 Φ2) + 8 μ2 (2 + Φ1 + 3 Φ2)) -
      18 η^2 θp (142 + 11 Φ1 - 8 μ2 (-22 + Φ1 - Φ2) + 11 Φ2 + μ1 (142 + 11 Φ1 +
         11 Φ2)) - 6 η (-4 × (9 + 9 μ1 + 10 μ2) + θp (143 + 70 Φ1 + 40 Φ2 +
         12 μ2 (6 + 7 Φ1 + 5 Φ2) + μ1 (143 + 70 Φ1 + 40 Φ2)))))) +
w^4 (-1 + η)^4 (2 x^3 (-1 + η)^3 (6 × (-1 + η) θp (-7 × (1 + μ1) + η
      (9 + 9 μ1 + 28 μ2) - ηt (9 + 9 μ1 + 28 μ2)) + (-1 + ηt)
    θl (-2 × (15 + 15 μ1 + 28 μ2) + θp (97 + 26 Φ1 + 16 Φ2 +
         4 μ2 (-6 + 3 Φ1 + 7 Φ2) + μ1 (97 + 26 Φ1 + 16 Φ2)))) -
  η θp (12 ηt (3 + 3 μ1 - 8 μ2) + 12 η^4 (9 + 9 μ1 + 28 μ2) - 12 η^3
    (7 × (1 + μ1) + ηt (9 + 9 μ1 + 28 μ2)) + 2 η^2 (-2 × (35 + 35 μ1 + 156 μ2) -
      θl (45 + 18 Φ1 - 4 μ2 (46 + 3 Φ1 - Φ2) + 8 Φ2 + μ1 (45 + 18 Φ1 + 8 Φ2)) +
      ηt (22 + 22 μ1 + 104 μ2 + θl (45 + 18 Φ1 - 4 μ2 (46 + 3 Φ1 - Φ2) + 8 Φ2 +
         μ1 (45 + 18 Φ1 + 8 Φ2)))) + η (4 × (29 + 29 μ1 + 72 μ2) +
      θl (-222 - 51 Φ1 - 3 μ1 (74 + 17 Φ1 - 3 Φ2) + 9 Φ2 + 8 μ2
         (-14 + 5 Φ1 + 9 Φ2)) + ηt (28 × (1 + μ1 + 8 μ2) + θl (222 + 51 Φ1 +
         3 μ1 (74 + 17 Φ1 - 3 Φ2) - 9 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2))))) +
  2 x (-1 + η) × (6 ηt θp (7 + 7 μ1 + 4 μ2) + 18 η^4 θp (9 + 9 μ1 + 28 μ2) -
    6 η^3 θp (30 + 30 μ1 + 28 μ2 + 3 ηt (9 + 9 μ1 + 28 μ2)) + η
     (2 θp (58 + 58 μ1 + 144 μ2 + ηt (23 + 23 μ1 + 88 μ2)) +
      (-1 + ηt) θl (6 × (1 + μ1 + 20 μ2) + θp (222 + 51 Φ1 +
         3 μ1 (74 + 17 Φ1 - 3 Φ2) - 9 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2)))) +
    η^2 (2 θp (-49 - 49 μ1 - 312 μ2 + ηt (37 + 37 μ1 + 152 μ2)) +
      (-1 + ηt) θl (-6 - 6 μ1 + 16 μ2 + θp (187 + 62 Φ1 -
         4 μ2 (98 + 3 Φ1 - 9 Φ2) + 32 Φ2 + μ1 (187 + 62 Φ1 + 32 Φ2))))) -
  x^2 (-1 + η)^2 (4 × (-1 + η) θp (-29 - 29 μ1 - 72 μ2 - 4 ηt (7 + 7 μ1 +
      17 μ2) + 9 η^2 (9 + 9 μ1 + 28 μ2) -
    3 η (4 × (3 + 3 μ1 - 7 μ2) + 3 ηt (9 + 9 μ1 + 28 μ2))) +
    (-1 + ηt) θl (-12 × (3 + 3 μ1 - 8 μ2) + θp (222 + 51 Φ1 +
      3 μ1 (74 + 17 Φ1 - 3 Φ2) - 9 Φ2 - 8 μ2 (-14 + 5 Φ1 + 9 Φ2)) +
    2 η (-4 × (9 + 9 μ1 + 10 μ2) + θp (239 + 70 Φ1 + 40 Φ2 +
         4 μ2 (-58 + 3 Φ1 + 15 Φ2) + μ1 (239 + 70 Φ1 + 40 Φ2))))) +
w^3 (-1 + η)^3 (x^4 (-1 + η)^4 θp (84 - 112 θl + 84 μ1 - 112 θl μ1 + 176 θl
    μ2 + 12 η^2 (9 + 9 μ1 + 28 μ2) + 12 ηt (9 + 9 μ1 + 28 μ2) - 12 η
    (4 × (4 + 4 μ1 + 7 μ2) + ηt (9 + 9 μ1 + 28 μ2)) - 11 θl Φ1 - 11 θl
    μ1 Φ1 + 40 θl μ2 Φ1 - 11 θl Φ2 - 11 θl μ1 Φ2 - 8 θl μ2 Φ2 + ηt θl
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            (112 + 11 Φ1 - 8 μ2 (22 + 5 Φ1 - Φ2) + 11 Φ2 + μ1 (112 + 11 Φ1 + 11 Φ2))) -
        4 x^3 (-1 + η)^3 (3 × (-1 + η) θp (-29 - 29 μ1 - 72 μ2 + 4 η^2 (9 + 9 μ1 + 28 μ2) -
              ηt (9 + 9 μ1 + 28 μ2) - η (1 + μ1 - 84 μ2 + 4 ηt (9 + 9 μ1 + 28 μ2))) +
          (-1 + ηt) θl (-3 × (15 + 15 μ1 + 28 μ2) + 3 θp (56 + 13 Φ1 +
                13 μ1 Φ1 + 8 Φ2 + 8 μ1 (7 + Φ2) + 2 μ2 (38 + 7 Φ1 + 7 Φ2)) + η θp
              (58 + 11 Φ1 - 8 μ2 (43 + 5 Φ1 - Φ2) + 11 Φ2 + μ1 (58 + 11 Φ1 + 11 Φ2)))) +
        η θp (12 ηt (3 + 3 μ1 - 8 μ2) + 12 η^5 (9 + 9 μ1 + 28 μ2) - 12 η^4
            (-11 - 11 μ1 - 56 μ2 + ηt (9 + 9 μ1 + 28 μ2)) + η^3
            (-12 × (49 + 49 μ1 + 156 μ2) + (-1 + ηt) θl (-104 + 11 Φ1 -
                8 μ2 (106 + 5 Φ1 - Φ2) + 11 Φ2 + μ1 (-104 + 11 Φ1 + 11 Φ2))) + 12 η^2
            (29 + 29 μ1 + 72 μ2 - θl (48 + 9 Φ1 + 4 Φ2 + 2 μ2 (26 + Φ1 + Φ2) +
                μ1 (48 + 9 Φ1 + 4 Φ2)) + ηt (2 × (1 + μ1 + 12 μ2) +
                θl (48 + 9 Φ1 + 4 Φ2 + 2 μ2 (26 + Φ1 + Φ2) + μ1 (48 + 9 Φ1 + 4 Φ2)))) +
          η (θl (-104 - 51 Φ1 + 9 Φ2 + μ1 (-104 - 51 Φ1 + 9 Φ2) + 8 μ2
                (14 + 3 Φ1 + 9 Φ2)) + ηt (48 × (1 + μ1 + 3 μ2) + θl (104 + 51 Φ1 +
                  μ1 (104 + 51 Φ1 - 9 Φ2) - 9 Φ2 - 8 μ2 (14 + 3 Φ1 + 9 Φ2))))) -
        2 x (-1 + η) × (6 ηt θp (7 + 7 μ1 + 4 μ2) + 24 η^5 θp (9 + 9 μ1 + 28 μ2) -
          6 η^4 θp (-17 - 17 μ1 - 140 μ2 + 4 ηt (9 + 9 μ1 + 28 μ2)) + η
            (6 ηt θp (19 + 19 μ1 + 40 μ2) + (-1 + ηt) θl (6 × (1 + μ1 + 20 μ2) +
                θp (104 + 51 Φ1 + μ1 (104 + 51 Φ1 - 9 Φ2) - 9 Φ2 - 8 μ2
                  (14 + 3 Φ1 + 9 Φ2)))) + 2 η^3 θp (-12 × (35 + 35 μ1 + 117 μ2) +
              θl (50 - 11 Φ1 + μ1 (50 - 11 Φ1 - 11 Φ2) + 8 μ2 (85 + 5 Φ1 - Φ2) -
                11 Φ2) + ηt (3 × (9 + 9 μ1 + 28 μ2) + θl (-50 + 11 Φ1 -
                  8 μ2 (85 + 5 Φ1 - Φ2) + 11 Φ2 + μ1 (-50 + 11 Φ1 + 11 Φ2)))) + 6
            η^2 (θp (87 + 87 μ1 + 216 μ2 + ηt (1 + μ1 + 40 μ2)) + (-1 + ηt)
                θl (-3 - 3 μ1 + 8 μ2 + θp (152 + 31 Φ1 + 16 Φ2 + 18 μ2 (10 + Φ1 + Φ2) +
                  μ1 (152 + 31 Φ1 + 16 Φ2)))) + x^2 (-1 + η)^2
          (12 × (-1 + η) θp (6 η^3 (9 + 9 μ1 + 28 μ2) - ηt (19 + 19 μ1 + 40 μ2) -
              3 η (29 + 29 μ1 + 72 μ2 + ηt (9 + 9 μ1 + 28 μ2)) -
              3 η^2 (-13 - 13 μ1 - 84 μ2 + 2 ηt (9 + 9 μ1 + 28 μ2))) +
            (-1 + ηt) θl (-12 × (3 + 3 μ1 - 8 μ2) + θp (104 + 51 Φ1 +
                μ1 (104 + 51 Φ1 - 9 Φ2) - 9 Φ2 - 8 μ2 (14 + 3 Φ1 + 9 Φ2)) + 6 η^2 θp
              (4 + 11 Φ1 - 8 μ2 (64 + 5 Φ1 - Φ2) + 11 Φ2 + μ1 (4 + 11 Φ1 + 11 Φ2)) +
              12 η (-2 × (9 + 9 μ1 + 10 μ2) + θp (5 × (32 + 7 Φ1 + 4 Φ2) +
                  6 μ2 (34 + 5 Φ1 + 5 Φ2) + 5 μ1 (7 Φ1 + 4 × (8 + Φ2))))))) +
  2 × (-1 + w (-1 + η)) (w + x + η - w η - x η)^2 (x^2 (-1 + η)^2 + η (1 + η) +
      x (1 + η - 2 η^2))^2
    θl (-8 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)
      (1 + w - w η)^2
      (-1 + ηt) θp
      (-6 uκ + u (6 + 7 Φ1 + 3 Φ2)) + f
      (-1 + η)
      (x^2 (-1 + η)^2 θp (-20 + 28 η - 8 η^2 - 4 ηt + 4 η ηt + 20 θl - 4 η
            θl - 20 ηt θl + 4 η ηt θl - 24 Φ1 + 24 η Φ1 + 24 θl Φ1 - 24 ηt
            θl Φ1 - 10 Φ2 + 14 η Φ2 - 4 η^2 Φ2 - 2 ηt Φ2 + 2 η ηt Φ2 + 16
```

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θl Φ2 - 2 η θl Φ2 - 16 ηt θl Φ2 + 2 η ηt θl Φ2 + 3 θl Φ2^2 - 3
ηt θl Φ2^2 + w (-1 + η) × (2 η^2 (2 + Φ2) + 6 × (2 + 4 Φ1 + Φ2) -
   3 θl (8 Φ1 + (2 + Φ2)^2) - 2 η (ηt (2 + Φ2) + 4 × (2 + 3 Φ1 + Φ2)) +
   ηt (2 × (2 + Φ2) + 3 θl (8 Φ1 + (2 + Φ2)^2)))) + x (-1 + η) ×
 (2 (w (-1 + η) - 2 η) (-1 + η) θp (10 - 4 η + 2 ηt + 12 Φ1 + 5 Φ2 - 2 η Φ2 +
      ηt Φ2 + w (-1 + η) (η (2 + Φ2) - ηt (2 + Φ2) - 3 × (2 + 4 Φ1 + Φ2))) +
   (-1 + ηt) θl (-12 + 12 θp + 40 η θp - 8 η^2 θp - 4 Φ1 + 8 θp Φ1 +
      48 η θp Φ1 + 2 θp Φ1^2 - 6 Φ2 + 12 θp Φ2 + 32 η θp Φ2 -
      4 η^2 θp Φ2 + 4 θp Φ1 Φ2 + 3 θp Φ2^2 + 6 η θp Φ2^2 + 2 w^2 (-1 + η)^2
       (-2 Φ1 - 3 × (2 + Φ2) + θp (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2))) -
      w (-1 + η) × (-4 × (6 + 2 Φ1 + 3 Φ2) + θp (44 + 4 Φ1^2 + 40 Φ2 +
            9 Φ2^2 + 8 Φ1 (5 + Φ2) + η (20 + 48 Φ1 + 22 Φ2 + 6 Φ2^2)))))) -
θp (20 η^2 - 28 η^3 + 8 η^4 + 12 ηt - 12 η ηt + 4 η^2 ηt - 4 η^3 ηt - 12 η
   θl - 20 η^2 θl + 4 η^3 θl + 12 η ηt θl + 20 η^2 ηt θl - 4 η^3 ηt θl + 24
   η^2 Φ1 - 24 η^3 Φ1 + 4 ηt Φ1 - 4 η ηt Φ1 - 8 η θl Φ1 - 24 η^2 θl Φ1 + 8 η
   ηt θl Φ1 + 24 η^2 ηt θl Φ1 - 2 η θl Φ1^2 + 2 η ηt θl Φ1^2 + 10 η^2 Φ2 - 14
   η^3 Φ2 + 4 η^4 Φ2 + 6 ηt Φ2 - 6 η ηt Φ2 + 2 η^2 ηt Φ2 - 2 η^3 ηt Φ2 - 12 η
   θl Φ2 - 16 η^2 θl Φ2 + 2 η^3 θl Φ2 + 12 η ηt θl Φ2 + 16 η^2 ηt θl Φ2 - 2
   η^3 ηt θl Φ2 - 4 η θl Φ1 Φ2 + 4 η ηt θl Φ1 Φ2 - 3 η θl Φ2^2 - 3 η^2 θl
   Φ2^2 + 3 η ηt θl Φ2^2 + 3 η^2 ηt θl Φ2^2 - w (-1 + η) × (2 η^4 (2 + Φ2) +
      4 ηt (6 + 2 Φ1 + 3 Φ2) - 2 η^3 (ηt (2 + Φ2) + 2 × (2 + 6 Φ1 + Φ2)) +
      η^2 (-8 × (2 + Φ2) + (-1 + ηt) θl (8 + 24 Φ1 + 10 Φ2 + 3 Φ2^2)) +
      η (20 + 24 Φ1 + 10 Φ2 - θl (44 + 4 Φ1^2 + 40 Φ2 + 9 Φ2^2 + 8 Φ1 (5 + Φ2)) +
         ηt (-2 × (4 Φ1 + 5 × (2 + Φ2)) + θl (44 + 4 Φ1^2 + 40 Φ2 + 9 Φ2^2 +
               8 Φ1 (5 + Φ2))))) + 2 w^2 (-1 + η)^2 (η^3 (2 + Φ2) +
      ηt (6 + 2 Φ1 + 3 Φ2) - η^2 (ηt (2 + Φ2) + 4 × (2 + 3 Φ1 + Φ2)) +
      η (3 × (2 + 4 Φ1 + Φ2) - θl (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2)) + ηt
            (-2 × (2 + Φ1 + Φ2) + θl (Φ1^2 + 3 (2 + Φ2)^2 + 2 Φ1 (8 + Φ2)))))))) +
2 cσ^2 (-1 + η)^2 (w^5 (-1 + η)^6 (2 x^5 (-1 + η)^5 θp (η - ηt + 4 μ1) (3 + 3 μ1 + 4 μ2) -
   η θp (η^5 (6 + 6 μ1 + 8 μ2) + ηt μ2 (11 + 11 μ1 + 8 μ2) - 2 η ηt
         (9 + 21 μ1^2 + 5 μ2 - 8 μ2^2 + 5 μ1 (6 + μ2)) + 2 η^3 (12 + 45 μ1 + 33 μ1^2 +
            21 μ2 + 49 μ1 μ2 - 52 μ2^2 + 2 ηt (-3 - 3 μ1 + μ2 + 5 μ1 μ2 + 14 μ2^2)) +
      η^2 (-ηt (24 + 26 μ1 + 2 μ1^2 + 9 μ2 - 111 μ1 μ2 - 64 μ2^2) +
            2 × (9 + 30 μ1 + 21 μ1^2 + 47 μ2 + 63 μ1 μ2 + 32 μ2^2)) - 2 η^4
         (ηt (3 + 3 μ1 + 4 μ2) + 2 × (-3 - 6 μ1^2 + μ2 + 14 μ2^2 - 3 μ1 (3 + μ2)))) +
   x^4 (-1 + η)^3 ((-1 + ηt) θl (18 + 2 μ1^2 + μ1 (20 - 43 μ2) + 21 μ2 - 8 μ2^2) -
      2 × (-1 + η) θp (9 + 42 μ1 + 33 μ1^2 + 27 μ2 + 59 μ1 μ2 + 5 η^2 (3 + 3 μ1 + 4 μ2) +
            2 ηt (-3 - 3 μ1 + μ2 + 5 μ1 μ2 + 14 μ2^2) + η (6 + 66 μ1 + 60 μ1^2 -
               2 μ2 + 70 μ1 μ2 - 28 μ2^2 - 5 ηt (3 + 3 μ1 + 4 μ2)))) +
   x (10 η^6 θp (3 + 3 μ1 + 4 μ2) - 2 η^5 θp (-9 - 69 μ1 - 60 μ1^2 + 28 μ2 -
            40 μ1 μ2 + 112 μ2^2 + 5 ηt (3 + 3 μ1 + 4 μ2)) - ηt
         θp (4 + 4 μ1^2 + 27 μ2 + 20 μ2^2 + μ1 (8 + 27 μ2)) + η
         (ηt θp (32 + 92 μ1 + 60 μ1^2 + 15 μ2 + 7 μ1 μ2 - 36 μ2^2) -
```

$$(-1+\eta t)\,\theta l\,\left(4+8\,\mu 1+4\,\mu 1^2+5\,\mu 2+5\,\mu 1\,\mu 2+4\,\mu 2^2\right)\Big)+2$$
$$\eta^4\,\theta p\,\Big(21+93\,\mu 1+72\,\mu 1^2+98\,\mu 2+166\,\mu 1\,\mu 2-44\,\mu 2^2+$$
$$\eta t\,\left(-9-9\,\mu 1+28\,\mu 2+40\,\mu 1\,\mu 2+112\,\mu 2^2\right)\Big)-\eta^3$$
$$\Big((-1+\eta t)\,\theta l\,\left(22+26\,\mu 1^2+\mu 1\,(48-67\,\mu 2)+37\,\mu 2+4\,\mu 2^2\right)+$$
$$\theta p\,\Big(2\times\left(18+87\,\mu 1+69\,\mu 1^2-51\,\mu 2+17\,\mu 1\,\mu 2-252\,\mu 2^2\right)+$$
$$\eta t\,\left(20+2\,\mu 1-18\,\mu 1^2+27\,\mu 2-229\,\mu 1\,\mu 2+20\,\mu 2^2\right)\Big)\Big)-\eta^2$$
$$\Big(2\times(-1+\eta t)\,\theta l\,\left(13+35\,\mu 1^2+21\,\mu 2+4\,\mu 2^2+\mu 1\,(48+25\,\mu 2)\right)+$$
$$\theta p\,\Big(6\times\left(9+30\,\mu 1+21\,\mu 1^2+47\,\mu 2+63\,\mu 1\,\mu 2+32\,\mu 2^2\right)+$$
$$\eta t\,\left(-40+34\,\mu 1+74\,\mu 1^2-23\,\mu 2+289\,\mu 1\,\mu 2+148\,\mu 2^2\right)\Big)\Big)\Big)-$$
$$x^2\,(-1+\eta)\times\Big(20\,\eta^5\,\theta p\,(3+3\,\mu 1+4\,\mu 2)-\theta l\,\mu 2\,(11+11\,\mu 1+8\,\mu 2)+$$
$$\eta t\,\theta l\,\mu 2\,(11+11\,\mu 1+8\,\mu 2)+2\,\eta t\,\theta p$$
$$\left(5+7\,\mu 1^2-11\,\mu 2-20\,\mu 2^2-3\,\mu 1\,(-4+5\,\mu 2)\right)-4\,\eta^4\,\theta p$$
$$\left(-3-60\,\mu 1^2+26\,\mu 2+84\,\mu 2^2+5\,\eta t\,(3+3\,\mu 1+4\,\mu 2)-\mu 1\,(63+50\,\mu 2)\right)+2$$
$$\eta^3\,\theta p\,\Big(78\,\mu 1^2+7\,\mu 1\,(15+32\,\mu 2)+3\times\left(9+52\,\mu 2+4\,\mu 2^2\right)+$$
$$2\,\eta t\,\left(-3+26\,\mu 2+84\,\mu 2^2+\mu 1\,(-3+30\,\mu 2)\right)\Big)-\eta^2$$
$$\Big((-1+\eta t)\,\theta l\,\left(62+54\,\mu 1^2+\mu 1\,(116-177\,\mu 2)+95\,\mu 2\right)+$$
$$\theta p\,\Big(-\eta t\,\left(8+50\,\mu 1+42\,\mu 1^2-19\,\mu 2+165\,\mu 1\,\mu 2-120\,\mu 2^2\right)+$$
$$6\times\left(12+57\,\mu 1+45\,\mu 1^2+\mu 2+45\,\mu 1\,\mu 2-84\,\mu 2^2\right)\Big)\Big)-\eta$$
$$\Big(4\times(-1+\eta t)\,\theta l\,\left(11+28\,\mu 1^2+13\,\mu 2-2\,\mu 2^2+3\,\mu 1\,(13+5\,\mu 2)\right)+$$
$$\theta p\,\Big(6\times\left(9+30\,\mu 1+21\,\mu 1^2+47\,\mu 2+63\,\mu 1\,\mu 2+32\,\mu 2^2\right)+\eta t\,\Big(-54+$$
$$2\,\mu 1+56\,\mu 1^2-17\,\mu 2+255\,\mu 1\,\mu 2+176\,\mu 2^2\Big)\Big)\Big)\Big)+x^3\,(-1+\eta)^2$$
$$\Big(-\Big((-1+\eta t)\,\theta l\,\Big(\eta\,\left(58+30\,\mu 1^2+\mu 1\,(88-153\,\mu 2)+79\,\mu 2-12\,\mu 2^2\right)+$$
$$2\times\left(9+21\,\mu 1^2+5\,\mu 2-8\,\mu 2^2+5\,\mu 1\,(6+\mu 2)\right)\Big)\Big)+(-1+\eta)\,\theta p$$
$$\Big(20\,\eta^3\,(3+3\,\mu 1+4\,\mu 2)+2\times\Big(9+30\,\mu 1+21\,\mu 1^2+47\,\mu 2+63\,\mu 1\,\mu 2+$$
$$32\,\mu 2^2\Big)+\eta t\,\left(-20+2\,\mu 1+22\,\mu 1^2+7\,\mu 2+87\,\mu 1\,\mu 2+76\,\mu 2^2\right)+$$
$$2\,\eta\,\Big(39+171\,\mu 1+132\,\mu 1^2+102\,\mu 2+226\,\mu 1\,\mu 2-52\,\mu 2^2+8\,\eta t$$
$$\left(-3-3\,\mu 1+\mu 2+5\,\mu 1\,\mu 2+14\,\mu 2^2\right)\Big)-4\,\eta^2\,\Big(5\,\eta t\,(3+3\,\mu 1+4\,\mu 2)+$$
$$4\times\left(-3-15\,\mu 1^2+\mu 2+14\,\mu 2^2-3\,\mu 1\,(6+5\,\mu 2)\right)\Big)\Big)\Big)\Big)+$$
$$w^4\,(-1+\eta)^4\,\Big(6\,x^6\,(-1+\eta)^7\,\theta p\,(\eta-\eta t+4\,\mu 1)\,(3+3\,\mu 1+4\,\mu 2)+$$
$$x^5\,(-1+\eta)^5\,\Big(-2\times(-1+\eta)\,\theta p\,\Big(47+185\,\mu 1+138\,\mu 1^2+141\,\mu 2+237\,\mu 1\,\mu 2+$$
$$18\,\eta^2\,(3+3\,\mu 1+4\,\mu 2)+\eta t\,\left(-29-29\,\mu 1-14\,\mu 2+30\,\mu 1\,\mu 2+84\,\mu 2^2\right)+$$
$$\eta\,\Big(29+245\,\mu 1+216\,\mu 1^2+14\,\mu 2+258\,\mu 1\,\mu 2-$$
$$84\,\mu 2^2-18\,\eta t\,(3+3\,\mu 1+4\,\mu 2)\Big)\Big)+(-1+\eta t)$$
$$\theta l\,\Big(-2\times\left(-11+29\,\mu 1^2+24\,\mu 2+36\,\mu 2^2+18\,\mu 1\,(1+8\,\mu 2)\right)+$$
$$\theta p\,\Big(72+17\,\Phi 1+12\,\mu 2^2\,(6+3\,\Phi 1-\Phi 2)+7\,\Phi 2+$$
$$12\,\mu 1^2\,(6+\Phi 1+\Phi 2)+\mu 2\,(288+59\,\Phi 1+37\,\Phi 2)+$$
$$\mu 1\,(144+29\,\Phi 1+19\,\Phi 2+\mu 2\,(288+35\,\Phi 1+61\,\Phi 2))\Big)\Big)\Big)+$$
$$\eta\,\theta p\,\Big(6\,\eta^7\,(3+3\,\mu 1+4\,\mu 2)-3\,\eta t\,\mu 2\,(11+11\,\mu 1+8\,\mu 2)+\eta\,\eta t$$
$$\left(40+112\,\mu 1^2+\mu 1\,(152-33\,\mu 2)-33\,\mu 2-96\,\mu 2^2\right)+2\,\eta^5$$
$$\Big(49+102\,\mu 1^2+119\,\mu 2-156\,\mu 2^2+\mu 1\,(151+159\,\mu 2)+$$
$$\eta t\,\left(-20-2\,\mu 2+84\,\mu 2^2+10\,\mu 1\,(-2+3\,\mu 2)\right)\Big)-2\,\eta^6$$
$$\Big(3\,\eta t\,(3+3\,\mu 1+4\,\mu 2)-2\times\left(10+18\,\mu 1^2+\mu 2-42\,\mu 2^2+\mu 1\,(28+9\,\mu 2)\right)\Big)-$$

$$\eta^3 \Big(116 + 320\,\mu1 + 144\,\eta t\,\mu1 + 204\,\mu1^2 + 144\,\eta t\,\mu1^2 + 294\,\mu2 -$$
$$37\,\eta t\,\mu2 + 350\,\mu1\,\mu2 + 139\,\eta t\,\mu1\,\mu2 - 200\,\mu2^2 + 72\,\eta t\,\mu2^2 +$$
$$2 \times (-1 + \eta t)\,\theta l \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) +$$
$$7\,\Phi2 + 12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big)\Big) +$$
$$\eta^4 \Big(72 + 150\,\mu1 + 78\,\mu1^2 + 520\,\mu2 + 488\,\mu1\,\mu2 + 520\,\mu2^2 +$$
$$2\,\eta t\,\Big(-13 + 37\,\mu1^2 + 38\,\mu2 + 92\,\mu2^2 + \mu1\,(24 + 266\,\mu2)\Big) +$$
$$\theta l \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) + 7\,\Phi2 +$$
$$12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big) -$$
$$\eta t\,\theta l \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) + 7\,\Phi2 +$$
$$12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big)\Big) - \eta^2$$
$$\Big(2 \times \Big(56 + 75\,\mu1^2 + 246\,\mu2 + 120\,\mu2^2 + \mu1\,(131 + 246\,\mu2)\Big) -$$
$$\theta l \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) + 7\,\Phi2 + 12\,\mu1^2\,(6 + \Phi1 + \Phi2) +$$
$$\mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) + \mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 +$$
$$\mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big) + \eta t\,\Big(-44 - 2\,\mu1 + 42\,\mu1^2 + 19\,\mu2 +$$
$$387\,\mu1\,\mu2 + 160\,\mu2^2 + \theta l \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) +$$
$$7\,\Phi2 + 12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big)\Big)\Big)\Big) +$$
$$x^4\,(-1 + \eta)^4 \Big(2 \times (-1 + \eta)\,\theta p \Big(103 + 280\,\mu1 + 177\,\mu1^2 + 395\,\mu2 +$$
$$443\,\mu1\,\mu2 + 168\,\mu2^2 + 45\,\eta^3\,(3 + 3\,\mu1 + 4\,\mu2) +$$
$$\eta t\,\Big(-38 + 25\,\mu1 + 63\,\mu1^2 + 40\,\mu2 + 244\,\mu1\,\mu2 + 188\,\mu2^2\Big) -$$
$$5\,\eta^2\,\Big(-29 - 137\,\mu1 - 108\,\mu1^2 - 14\,\mu2 - 114\,\mu1\,\mu2 + 84\,\mu2^2 +$$
$$9\,\eta t\,(3 + 3\,\mu1 + 4\,\mu2)\Big) + \eta\,\Big(266 + 956\,\mu1 + 690\,\mu1^2 + 697\,\mu2 + 1125$$
$$\mu1\,\mu2 - 240\,\mu2^2 + 5\,\eta t\,\Big(-29 - 29\,\mu1 - 14\,\mu2 + 30\,\mu1\,\mu2 + 84\,\mu2^2\Big)\Big)\Big) -$$
$$(-1 + \eta t)\,\theta l \Big(62 + 132\,\mu1 + 70\,\mu1^2 - 81\,\mu2 - 225\,\mu1\,\mu2 - 168\,\mu2^2 +$$
$$2\,\theta p \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) + 7\,\Phi2 +$$
$$12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big) +$$
$$\eta\,\Big(-4 \times \Big(-24 + 45\,\mu1^2 + 40\,\mu2 + 66\,\mu2^2 + \mu1\,(21 + 314\,\mu2)\Big) +$$
$$5\,\theta p \Big(72 + 17\,\Phi1 + 12\,\mu2^2\,(6 + 3\,\Phi1 - \Phi2) + 7\,\Phi2 +$$
$$12\,\mu1^2\,(6 + \Phi1 + \Phi2) + \mu2\,(288 + 59\,\Phi1 + 37\,\Phi2) +$$
$$\mu1\,(144 + 29\,\Phi1 + 19\,\Phi2 + \mu2\,(288 + 35\,\Phi1 + 61\,\Phi2))\Big)\Big)\Big)\Big) +$$
$$x^3\,(-1 + \eta)^3 \Big(-\Big((-1 + \eta)\,\theta p \Big(120\,\eta^4\,(3 + 3\,\mu1 + 4\,\mu2) + 2 \times \Big(56 +$$
$$131\,\mu1 + 75\,\mu1^2 + 246\,\mu2 + 246\,\mu1\,\mu2 + 120\,\mu2^2\Big) + \eta t\,\Big(-56 + 22\,\mu1 +$$
$$78\,\mu1^2 + 197\,\mu2 + 469\,\mu1\,\mu2 + 364\,\mu2^2\Big) - 20\,\eta^3\,\Big(-29 - 101\,\mu1 -$$
$$72\,\mu1^2 - 14\,\mu2 - 66\,\mu1\,\mu2 + 84\,\mu2^2 + 6\,\eta t\,(3 + 3\,\mu1 + 4\,\mu2)\Big) +$$
$$4\,\eta^2\,\Big(297 + 987\,\mu1 + 690\,\mu1^2 + 689\,\mu2 + 1065\,\mu1\,\mu2 - 480\,\mu2^2 +$$
$$5\,\eta t\,\Big(-29 - 29\,\mu1 - 14\,\mu2 + 30\,\mu1\,\mu2 + 84\,\mu2^2\Big)\Big) +$$
$$2\,\eta\,\Big(423 + 1131\,\mu1 + 708\,\mu1^2 + 1578\,\mu2 + 1750\,\mu1\,\mu2 + 524\,\mu2^2 +$$
$$2\,\eta t\,\Big(-78 + 35\,\mu1 + 113\,\mu1^2 + 72\,\mu2 + 514\,\mu1\,\mu2 + 370\,\mu2^2\Big)\Big)\Big)\Big) +$$
$$(-1 + \eta t)\,\theta l \Big(2 \times \Big(20 + 56\,\mu1^2 + \mu1\,(76 - 33\,\mu2) - 33\,\mu2 - 60\,\mu2^2\Big) +$$

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        θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
            12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
            μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2))) +
        2 η^2 (-6 × (-13 + 16 μ1^2 + 16 μ2 + 30 μ2^2 + μ1 (3 + 170 μ2)) +
            5 θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
                μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2)))) +
        η (214 + 572 μ1 + 358 μ1^2 - 131 μ2 - 659 μ1 μ2 - 420 μ2^2 +
            8 θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
                μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2))))))) -
x (-1 + η) × (36 η^7 θp (3 + 3 μ1 + 4 μ2) - 3 ηt θp (4 + 4 μ1^2 + 27 μ2 +
        20 μ2^2 + μ1 (8 + 27 μ2)) - 2 η^6 θp (-91 - 216 μ1^2 + 2 μ2 +
        420 μ2^2 + 18 ηt (3 + 3 μ1 + 4 μ2) - μ1 (307 + 138 μ2)) + η
      (ηt θp (60 + 144 μ1^2 + μ1 (204 - 203 μ2) - 179 μ2 - 276 μ2^2) -
        3 × (-1 + ηt) θl (4 + 4 μ1^2 + 5 μ2 + 4 μ2^2 + μ1 (8 + 5 μ2))) + 2
      η^5 θp (214 + 474 μ1^2 + 603 μ2 - 540 μ2^2 + μ1 (688 + 807 μ2) +
        ηt (-91 + 2 μ2 + 420 μ2^2 + μ1 (-91 + 150 μ2))) - η^2
      (θp (6 × (56 + 75 μ1^2 + 246 μ2 + 120 μ2^2 + μ1 (131 + 246 μ2)) +
            ηt (-176 + 70 μ1^2 + 107 μ2 + 588 μ2^2 + μ1 (-106 + 1091 μ2))) +
        (-1 + ηt) θl (72 + 276 μ1 + 204 μ1^2 + 62 μ2 + 86 μ1 μ2 -
            24 μ2^2 + 3 θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
                μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2))))) +
    η^4 (2 θp (86 + 18 μ1^2 + 901 μ2 + 1188 μ2^2 + μ1 (104 + 761 μ2) +
            ηt (-19 + 174 μ1^2 + 182 μ2 + 296 μ2^2 + μ1 (155 + 982 μ2))) -
        (-1 + ηt) θl (-2 × (-15 + 3 μ1^2 + 8 μ2 + 24 μ2^2 + 4 μ1 (-3 + 49 μ2)) +
            5 θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
                μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2))))) - η^3
      (θp (2 × (277 + 483 μ1^2 + 836 μ2 - 132 μ2^2 + 8 μ1 (95 + 121 μ2)) +
            ηt (-104 + 410 μ1^2 - 143 μ2 + 508 μ2^2 + μ1 (306 + 889 μ2))) +
        (-1 + ηt) θl (90 + 308 μ1 + 218 μ1^2 + 31 μ2 - 209 μ1 μ2 -
            84 μ2^2 + 8 θp (72 + 17 Φ1 + 12 μ2^2 (6 + 3 Φ1 - Φ2) + 7 Φ2 +
                12 μ1^2 (6 + Φ1 + Φ2) + μ2 (288 + 59 Φ1 + 37 Φ2) +
                μ1 (144 + 29 Φ1 + 19 Φ2 + μ2 (288 + 35 Φ1 + 61 Φ2))))))) +
x^2 (-1 + η)^2 (8 ηt θp + 28 ηt θp μ1 + 20 ηt θp μ1^2 - 33 θl μ2 + 33
      ηt θl μ2 - 194 ηt θp μ2 - 33 θl μ1 μ2 + 33 ηt θl μ1
      μ2 - 218 ηt θp μ1 μ2 - 24 θl μ2^2 + 24 ηt θl μ2^2 - 216
      ηt θp μ2^2 + 90 η^6 θp (3 + 3 μ1 + 4 μ2) - 10 η^5 θp
      (-31 - 108 μ1^2 + 8 μ2 + 168 μ2^2 + 9 ηt (3 + 3 μ1 + 4 μ2) - μ1 (139 + 84 μ2)) +
    2 η^4 θp (5 ηt (-31 + 8 μ2 + 168 μ2^2 + μ1 (-31 + 60 μ2)) +
        2 × (183 + 420 μ1^2 + 611 μ2 - 300 μ2^2 + μ1 (603 + 795 μ2))) - η
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$$
\begin{aligned}
&\Big(\theta p\,\big(6\times\big(56+75\,\mu1^2+246\,\mu2+120\,\mu2^2+\mu1\,(131+246\,\mu2)\big)+\\
&\quad\eta t\,\big(-188+106\,\mu1^2+285\,\mu2+792\,\mu2^2+\mu1\,(-82+1173\,\mu2)\big)\big)+\\
&\quad(-1+\eta t)\,\theta l\,\big(4\times\big(28+79\,\mu1^2-\mu2-36\,\mu2^2+\mu1\,(107+5\,\mu2)\big)+\\
&\quad 3\,\theta p\,\big(72+17\,\Phi1+12\,\mu2^2\,(6+3\,\Phi1-\Phi2)+7\,\Phi2+\\
&\quad 12\,\mu1^2\,(6+\Phi1+\Phi2)+\mu2\,(288+59\,\Phi1+37\,\Phi2)+\\
&\quad \mu1\,(144+29\,\Phi1+19\,\Phi2+\mu2\,(288+35\,\Phi1+61\,\Phi2))\big)\big)\big)-2\,\eta^3\\
&\big(-\theta p\,\big(-5-318\,\mu1^2+1002\,\mu2+2004\,\mu2^2+\mu1\,(-323+582\,\mu2)+\\
&\quad 2\,\eta t\,\big(25+150\,\mu1^2+166\,\mu2+126\,\mu2^2+5\,\mu1\,(35+132\,\mu2)\big)\big)+\\
&\quad(-1+\eta t)\,\theta l\,\big(-2\times\big(-28+19\,\mu1^2+24\,\mu2+54\,\mu2^2+\mu1\,(-9+366\,\mu2)\big)+\\
&\quad 5\,\theta p\,\big(72+17\,\Phi1+12\,\mu2^2\,(6+3\,\Phi1-\Phi2)+7\,\Phi2+\\
&\quad 12\,\mu1^2\,(6+\Phi1+\Phi2)+\mu2\,(288+59\,\Phi1+37\,\Phi2)+\\
&\quad \mu1\,(144+29\,\Phi1+19\,\Phi2+\mu2\,(288+35\,\Phi1+61\,\Phi2))\big)\big)\big)-\eta^2\\
&\Big(\theta p\,\big(6\times\big(161+279\,\mu1^2+542\,\mu2+68\,\mu2^2+\mu1\,(440+618\,\mu2)\big)+\\
&\quad\eta t\,\big(-284+514\,\mu1^2-95\,\mu2+1176\,\mu2^2+\mu1\,(230+1849\,\mu2)\big)\big)+\\
&\quad(-1+\eta t)\,\theta l\,\big(242+748\,\mu1+506\,\mu1^2-19\,\mu2-643\,\mu1\,\mu2-\\
&\quad 336\,\mu2^2+12\,\theta p\,\big(72+17\,\Phi1+12\,\mu2^2\,(6+3\,\Phi1-\Phi2)+\\
&\quad 7\,\Phi2+12\,\mu1^2\,(6+\Phi1+\Phi2)+\mu2\,(288+59\,\Phi1+37\,\Phi2)+\\
&\quad \mu1\,(144+29\,\Phi1+19\,\Phi2+\mu2\,(288+35\,\Phi1+61\,\Phi2))\big)\big)\big)\big)\big)-\\
&(x+\eta-x\,\eta)^2\,\Big(-2\,x^6\,(-1+\eta)^6\,\theta p\,\big(2-2\,\theta l-25\,\mu1+13\,\theta l\,\mu1-27\,\mu1^2+\\
&\quad 15\,\theta l\,\mu1^2+12\,\mu2-12\,\theta l\,\mu2-44\,\mu1\,\mu2+28\,\theta l\,\mu1\\
&\quad \mu2+8\,\eta t\,(1+\mu1+2\,\mu2)+4\,\eta^2\,(3+3\,\mu1+8\,\mu2)-\eta\\
&\quad \big(14-13\,\mu1-27\,\mu1^2+44\,\mu2-44\,\mu1\,\mu2-4\,\theta l\,(1+\mu1+4\,\mu2)+\\
&\quad 4\,\eta t\,(2+\theta l+2\,\mu1+\theta l\,\mu1+4\,\mu2+4\,\theta l\,\mu2)\big)-\eta t\,\theta l\\
&\quad \big(-2+15\,\mu1^2+\mu1\,(13+28\,\mu2)+4\,\mu2\,(-3+\Phi2)\big)+4\,\theta l\,\mu2\,\Phi2\big)-\\
&\eta\,\theta p\,\big(8\,\eta^7\,(3+3\,\mu1+8\,\mu2)+\eta t\,\big(2+2\,\mu1^2+\mu1\,(4-21\,\mu2)-21\,\mu2-16\,\mu2^2\big)-\\
&\quad 2\,\eta^6\,\big(-10-37\,\mu1-27\,\mu1^2-24\,\mu1\,\mu2+56\,\mu2^2-4\,\theta l\,(1+\mu1+4\,\mu2)+\\
&\quad 4\,\eta t\,(2+\theta l+2\,\mu1+\theta l\,\mu1+4\,\mu2+4\,\theta l\,\mu2)\big)-\eta^2\\
&\quad \big(4\times\big(9+9\,\mu1^2+38\,\mu2+24\,\mu2^2+2\,\mu1\,(9+19\,\mu2)\big)-2\,\theta l\,\big(7+9\,\Phi1+\\
&\quad 4\,\mu2^2\,(8+3\,\Phi1-4\,\Phi2)+\mu1^2\,(5+3\,\Phi1-2\,\Phi2)+3\,\mu1\,(4+4\,\Phi1-\Phi2)-\\
&\quad \Phi2-\mu1\,\mu2\,(-48+5\,\Phi1+\Phi2)+\mu2\,(52+25\,\Phi1+\Phi2)\big)+\\
&\quad \eta t\,\big(2-2\,\mu1^2-\mu2-17\,\mu1\,\mu2-16\,\mu2^2+2\,\theta l\,\big(7+9\,\Phi1+4\,\mu2^2\\
&\quad (8+3\,\Phi1-4\,\Phi2)+\mu1^2\,(5+3\,\Phi1-2\,\Phi2)+3\,\mu1\,(4+4\,\Phi1-\Phi2)-\\
&\quad \Phi2-\mu1\,\mu2\,(-48+5\,\Phi1+\Phi2)+\mu2\,(52+25\,\Phi1+\Phi2)\big)\big)\big)+\\
&\quad \eta^3\,\big(-2\times\big(7+36\,\mu1^2+35\,\mu2+72\,\mu2^2+\mu1\,(43+91\,\mu2)\big)+\\
&\quad \eta t\,\big(-4-108\,\mu1-104\,\mu1^2+\mu2-279\,\mu1\,\mu2-40\,\mu2^2+\\
&\quad \theta l\,\big(-30-9\,\Phi1-4\,\mu2^2\,(26+3\,\Phi1-19\,\Phi2)+\mu1^2\,(-74+6\,\Phi1-4\,\Phi2)+\\
&\quad \mu1\,(-104-3\,\Phi1+\mu2\,(-272+61\,\Phi1-9\,\Phi2)-3\,\Phi2)+\Phi2+\\
&\quad \mu2\,(-152-31\,\Phi1+3\,\Phi2)\big)\big)+\theta l\,\big(30+9\,\Phi1+4\,\mu2^2\,(26+3\,\Phi1-\\
&\quad 19\,\Phi2)+\mu2\,(152+31\,\Phi1-3\,\Phi2)-\Phi2+\mu1^2\,(74-6\,\Phi1+4\,\Phi2)+\\
&\quad \mu1\,(104+3\,\Phi1+3\,\Phi2+\mu2\,(272-61\,\Phi1+9\,\Phi2))\big)\big)+\eta^5\\
&\quad \big(4\,\eta t\,\big(-4+9\,\mu1^2-3\,\mu2+14\,\mu2^2+\mu1\,(5+33\,\mu2)\big)+\\
&\quad 2\times\big(-5+36\,\mu1^2-13\,\mu2+16\,\mu2^2+\mu1\,(31+75\,\mu2)\big)+\\
&\quad \theta l\,\big(12+38\,\mu2+8\,\mu2\,\Phi2+\mu1^2\,(48+9\,\Phi1+9\,\Phi2)+
\end{aligned}
$$

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            μ1 (60 + 9 Φ1 + 9 Φ2 + 2 μ2 (55 + 14 Φ1 + 14 Φ2))) -
        ηt θl (12 + 38 μ2 + 8 μ2 Φ2 + μ1^2 (48 + 9 Φ1 + 9 Φ2) +
            μ1 (60 + 9 Φ1 + 9 Φ2 + 2 μ2 (55 + 14 Φ1 + 14 Φ2))) + η
      (θl (-2 + 9 Φ1 + μ1^2 (-2 + 9 Φ1 - Φ2) - Φ2 + 4 μ2^2 (2 + 3 Φ1 + Φ2) +
            μ2 (23 Φ1 + 5 × (2 + Φ2)) + μ1 (18 Φ1 + 23 μ2 Φ1 - 2 × (2 + Φ2) +
                5 μ2 (2 + Φ2))) + ηt (20 + 56 μ1 + 36 μ1^2 + 11 μ2 +
            35 μ1 μ2 - 16 μ2^2 - θl (-2 + 9 Φ1 + μ1^2 (-2 + 9 Φ1 - Φ2) -
                Φ2 + 4 μ2^2 (2 + 3 Φ1 + Φ2) + μ2 (23 Φ1 + 5 × (2 + Φ2)) +
                μ1 (18 Φ1 + 23 μ2 Φ1 - 2 × (2 + Φ2) + 5 μ2 (2 + Φ2))))) - 2
      η^4 (-8 + μ1 + 9 μ1^2 - 92 μ2 - 68 μ1 μ2 - 160 μ2^2 - θl
          (9 + 2 μ2 (16 + Φ1 + 2 Φ2) - 4 μ2^2 (-6 + 5 Φ2) +
            μ1^2 (55 + 3 Φ1 + 8 Φ2) + μ1 (64 + 3 Φ1 + 8 Φ2 + 2 μ2 (74 + 11 Φ2))) +
        ηt (-2 × (4 + 7 μ1^2 + 13 μ2 + μ1 (11 + 29 μ2)) + θl (9 +
                2 μ2 (16 + Φ1 + 2 Φ2) - 4 μ2^2 (-6 + 5 Φ2) + μ1^2 (55 + 3 Φ1 + 8 Φ2) +
                μ1 (64 + 3 Φ1 + 8 Φ2 + 2 μ2 (74 + 11 Φ2))))))) -
x^3 (-1 + η)^3 (-((-1 + η) θp (160 η^4 (3 + 3 μ1 + 8 μ2) + ηt (-24 -
                8 μ1 + 16 μ1^2 - 7 μ2 - 31 μ1 μ2 + 4 μ2^2) +
            4 × (9 + 18 μ1 + 9 μ1^2 + 33 μ2 + 33 μ1 μ2 + 32 μ2^2) - 40 η^3 (-10 -
                37 μ1 - 27 μ1^2 - 10 μ2 - 34 μ1 μ2 + 28 μ2^2 + 8 ηt (1 + μ1 + 2 μ2)) +
            8 η (25 + 79 μ1 + 54 μ1^2 + 99 μ2 + 155 μ1 μ2 + 144 μ2^2 +
                4 ηt (-2 + 3 μ1 + 5 μ1^2 + μ2 + 19 μ1 μ2 + 7 μ2^2)) +
            4 η^2 (49 + 364 μ1 + 315 μ1^2 + 65 μ2 + 561 μ1 μ2 + 40 μ2^2 + 2 ηt
                (-40 - 22 μ1 + 18 μ1^2 - 55 μ2 + 81 μ1 μ2 + 70 μ2^2)))) + (-1 + ηt)
      θl (38 + 72 μ1 + 34 μ1^2 + 54 μ2 + 70 μ1 μ2 + 16 μ2^2 + 160 η^4 θp
          (1 + μ1 + 4 μ2) + θp (μ1 (2 + 13 Φ1 + μ2 (46 - 30 Φ1 - 22 Φ2) - 17 Φ2) +
            μ1^2 (4 + 3 Φ1 - 7 Φ2) + 2 × (-1 + 5 Φ1 + 3 μ2 (5 + 3 Φ1 - 5 Φ2) -
                5 Φ2 - 4 μ2^2 (-4 + 7 Φ2))) - 2 η^2 (12 × (7 μ1^2 + 4 μ2 +
                7 μ1 (1 + 4 μ2)) + θp (-66 + μ1^2 (-472 + 9 Φ1 - 41 Φ2) +
                μ1 (-538 + 9 Φ1 + 2 μ2 (-599 + 66 Φ1 - 44 Φ2) - 41 Φ2) -
                2 μ2 (103 + 10 Φ1 + 20 Φ2) + 8 μ2^2 (-36 + 25 Φ2))) + 2 η^3
          (-12 μ1 (9 + 9 μ1 + 28 μ2) + 5 θp (8 + 2 μ2 (7 + 8 Φ2) + μ1^2 (78 + 9 Φ1 +
                9 Φ2) + μ1 (86 + 9 Φ1 + 9 Φ2 + 2 μ2 (83 + 14 Φ1 + 14 Φ2)))) +
        η (80 + 140 μ1^2 + 65 μ2 + 12 μ2^2 + μ1 (220 + 321 μ2) +
            θp (2 × (48 + 12 Φ1 + 2 μ2^2 (110 + 3 Φ1 - 85 Φ2) +
                μ2 (229 + 38 Φ1 - 30 Φ2) - 8 Φ2) + μ1^2 (278 - 33 Φ1 + 7 Φ2) -
                μ1 (-374 + 9 Φ1 + 9 Φ2 + μ2 (-914 + 304 Φ1 + 24 Φ2))))))) +
x^4 (-1 + η)^4 (-2 × (-1 + η) θp (25 + 79 μ1 + 54 μ1^2 + 95 μ2 + 151
          μ1 μ2 + 152 μ2^2 + 60 η^3 (3 + 3 μ1 + 8 μ2) +
        4 ηt (-2 + 2 μ1 + 4 μ1^2 + μ2 + 15 μ1 μ2 + 7 μ2^2) - 5 η^2 (-18 -
            99 μ1 - 81 μ1^2 - 8 μ2 - 112 μ1 μ2 + 56 μ2^2 + 24 ηt (1 + μ1 + 2 μ2)) +
        η (37 + 352 μ1 + 315 μ1^2 + 55 μ2 + 583 μ1 μ2 + 120 μ2^2 +
            2 ηt (-40 - 31 μ1 + 9 μ1^2 - 55 μ2 + 53 μ1 μ2 + 70 μ2^2))) +
      (-1 + ηt) θl (28 - 4 × (-7 + 20 η + 36 η^2) μ1^2 + 27 μ2 - 64 η μ2 +
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8 μ2^2 - μ1 (-56 - 107 μ2 + 80 η (1 + 4 μ2) + 16 η^2 (9 + 28 μ2)) + θp
 (22 + 102 μ2 + 112 μ2^2 + 120 η^3 (1 + μ1 + 4 μ2) + 5 Φ1 + 15 μ2 Φ1 - 5 Φ2 -
   19 μ2 Φ2 - 88 μ2^2 Φ2 + μ1^2 (68 - 9 Φ1 + Φ2) - μ1 (-90 + 4 Φ1 + 4 Φ2 +
      μ2 (-214 + 81 Φ1 + 11 Φ2)) + 2 η (29 + 2 μ2 (42 + 5 Φ1 + 10 Φ2) +
      μ1^2 (223 - 11 Φ1 + 14 Φ2) - 4 μ2^2 (-38 + 25 Φ2) +
      μ1 (252 - 11 Φ1 + 14 Φ2 + μ2 (552 - 88 Φ1 + 22 Φ2))) +
   5 η^2 (4 + 9 μ1^2 (12 + Φ1 + Φ2) + 2 μ2 (-5 + 12 Φ2) + μ1 (112 +
         9 Φ1 + 9 Φ2 + μ2 (222 + 28 Φ1 + 28 Φ2))))) + x^5 (-1 + η)^5
(4 × (-1 + ηt) θl ((3 + 9 η) μ1^2 + 4 μ2 + μ1 (3 + 12 μ2 + η (9 + 28 μ2))) +
  θp (-10 + 10 θl - 136 μ1 + 94 θl μ1 - 126 μ1^2 + 84 θl μ1^2 - 18 μ2 +
    26 θl μ2 - 242 μ1 μ2 + 202 θl μ1 μ2 - 80 μ2^2 + 64 θl μ2^2 +
    48 η^3 (3 + 3 μ1 + 8 μ2) + 4 ηt (8 + μ1 (8 - 5 μ2) + 11 μ2 - 14 μ2^2) -
    4 η^2 (30 - 51 μ1 - 81 μ1^2 + 110 μ2 - 122 μ1 μ2 + 28 μ2^2 -
      12 θl (1 + μ1 + 4 μ2) + 12 ηt (2 + θl + 2 μ1 + θl μ1 + 4 μ2 + 4 θl μ2)) -
    7 θl μ1 Φ1 - 7 θl μ1^2 Φ1 + 4 θl μ2 Φ1 - 44 θl μ1 μ2 Φ1 +
    3 θl μ1 Φ2 + 3 θl μ1^2 Φ2 + 8 θl μ2 Φ2 - 40 θl μ2^2 Φ2 +
    ηt θl (-10 + μ1 (-94 + 7 Φ1 + μ2 (-202 + 44 Φ1) - 3 Φ2) - 2 μ2
       (13 + 2 Φ1 + 4 Φ2) + 8 μ2^2 (-8 + 5 Φ2) + μ1^2 (7 Φ1 - 3 × (28 + Φ2))) +
    η (4 ηt (16 + 37 μ2 + 14 μ2^2 + μ1 (16 + 5 μ2)) - 2 ×
       (7 + 99 μ1^2 - 37 μ2 - 96 μ2^2 + μ1 (106 + 123 μ2)) +
      θl (-8 - 82 μ2 + 48 μ2 Φ2 + 9 μ1^2 (22 + Φ1 + Φ2) +
         μ1 (190 + 9 Φ1 + 9 Φ2 + μ2 (390 + 28 Φ1 + 28 Φ2))) -
      ηt θl (-8 - 82 μ2 + 48 μ2 Φ2 + 9 μ1^2 (22 + Φ1 + Φ2) +
         μ1 (190 + 9 Φ1 + 9 Φ2 + μ2 (390 + 28 Φ1 + 28 Φ2))))) -
x^2 (-1 + η)^2 ((-1 + η) θp (120 η^5 (3 + 3 μ1 + 8 μ2) - 10 η^4 (-42 -
      123 μ1 - 81 μ1^2 - 52 μ2 - 92 μ1 μ2 + 112 μ2^2 + 24 ηt (1 + μ1 + 2 μ2)) -
    2 ηt (15 + 3 μ1^2 + 11 μ2 - 4 μ2^2 + 3 μ1 (6 + 5 μ2)) +
    12 η^2 (25 + 79 μ1 + 54 μ1^2 + 103 μ2 + 159 μ1 μ2 + 136 μ2^2 +
      4 ηt (-2 + 4 μ1 + 6 μ1^2 + μ2 + 23 μ1 μ2 + 7 μ2^2)) +
    4 η^3 (61 + 376 μ1 + 315 μ1^2 + 75 μ2 + 539 μ1 μ2 - 40 μ2^2 +
      2 ηt (-40 - 13 μ1 + 27 μ1^2 - 55 μ2 + 109 μ1 μ2 + 70 μ2^2)) +
    η (-ηt (68 + 76 μ1 + 8 μ1^2 + 5 μ2 + 93 μ1 μ2 - 24 μ2^2) +
      4 × (27 + 54 μ1 + 27 μ1^2 + 104 μ2 + 104 μ1 μ2 + 88 μ2^2))) -
  (-1 + ηt) θl (10 + 20 μ1 + 10 μ1^2 + 11 μ2 + 11 μ1 μ2 + 8 μ2^2 +
    120 η^5 θp (1 + μ1 + 4 μ2) + 2 η (34 + 84 μ1 + 50 μ1^2 + 38 μ2 +
      62 μ1 μ2 + 4 μ2^2 + θp (5 + 19 Φ1 + μ2 (82 + 43 Φ1 - 29 Φ2) +
         μ1 (14 + 25 Φ1 + μ2 (94 - 35 Φ1 - 23 Φ2) - 20 Φ2) +
         4 μ2^2 (16 + 3 Φ1 - 18 Φ2) + μ1^2 (9 + 6 Φ1 - 9 Φ2) - 11 Φ2)) +
    θp (7 μ2 Φ1 + 5 × (-2 + Φ1 - Φ2) + 5 μ1^2 (-2 + Φ1 - Φ2) - 11 μ2 (2 + Φ2) -
      8 μ2^2 (2 + Φ2) + μ1 (7 μ2 Φ1 + 10 × (-2 + Φ1 - Φ2) - 11 μ2 (2 + Φ2))) +
    η^2 (76 + 196 μ1^2 + 49 μ2 + μ1 (272 + 321 μ2) - 3 θp
       (μ1^2 (-142 + 15 Φ1 - 5 Φ2) - 2 × (26 + 7 Φ1 + 2 μ2^2
            (54 + 3 Φ1 - 41 Φ2) + μ2 (127 + 23 Φ1 - 11 Φ2) - 3 Φ2) +
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                μ1 (-194 + Φ1 + Φ2 + 2 μ2 (-243 + 71 Φ1 + Φ2)))) +
          2 η^4 (-8 μ1 (9 + 9 μ1 + 28 μ2) + 5 θp (9 μ1^2 (7 + Φ1 + Φ2) +
                2 × (5 + μ2 (13 + 6 Φ2)) +
                μ1 (73 + 9 Φ1 + 9 Φ2 + 2 μ2 (69 + 14 Φ1 + 14 Φ2)))) +
          4 η^3 (-4 × (9 μ1^2 + 4 μ2 + 9 μ1 (1 + 4 μ2)) + θp (37 + 2 μ2 (61 + 5 Φ1 +
                    10 Φ2) - 4 μ2^2 (-34 + 25 Φ2) + μ1^2 (249 + 2 Φ1 + 27 Φ2) +
                μ1 (286 + 2 Φ1 + 27 Φ2 + μ2 (646 - 44 Φ1 + 66 Φ2))))))) +
    x (-1 + η) × (48 η^7 θp (3 + 3 μ1 + 8 μ2) + ηt θp (6 + 6 μ1^2 + μ1 (12 - 5 μ2) -
          5 μ2 - 4 μ2^2) - 4 η^6 θp (-18 - 99 μ1 - 81 μ1^2 + 22 μ2 - 82 μ1 μ2 + 140 μ2^2 -
          12 θl (1 + μ1 + 4 μ2) + 12 ηt (2 + θl + 2 μ1 + θl μ1 + 4 μ2 + 4 θl μ2)) -
        η^2 (θp (-ηt (12 + 20 μ1^2 - 23 μ2 + 4 μ2^2 + μ1 (32 + 49 μ2)) +
              4 × (27 + 27 μ1^2 + 109 μ2 + 80 μ2^2 + μ1 (54 + 109 μ2))) +
            (-1 + ηt) θl (30 + 66 μ1^2 + 22 μ2 - 8 μ2^2 + 6 μ1 (16 + 9 μ2) +
              θp (μ1 (50 + 61 Φ1 + μ2 (238 - 50 Φ1 - 26 Φ2) - 29 Φ2) +
                2 × (13 + 23 Φ1 + 4 μ2^2 (20 + 6 Φ1 - 15 Φ2) +
                    μ2 (119 + 59 Φ1 - 13 Φ2) - 7 Φ2) + 3 μ1^2 (8 + 5 Φ1 - 5 Φ2)))) +
        η^3 (-θp (92 + 36 × (9 + 8 ηt) μ1^2 + 21 × (20 + ηt) μ2 + 4 ×
                (176 + 47 ηt) μ2^2 + μ1 (416 + 868 μ2 + 3 ηt (96 + 319 μ2))) +
            (-1 + ηt) θl (-24 - 84 μ1^2 - 11 μ2 + 4 μ2^2 - μ1 (108 + 107 μ2) +
              θp (μ1^2 (-290 + 27 Φ1 - 13 Φ2) + μ1 (-402 - 5 Φ1 +
                    2 μ2 (-515 + 132 Φ1 - 8 Φ2) - 5 Φ2) - 2 × (56 + 16 Φ1 + 2 μ2^2
                     (106 + 9 Φ1 - 79 Φ2) + μ2 (279 + 54 Φ1 - 14 Φ2) - 4 Φ2)))) +
        η^4 (4 × (-1 + ηt) θl (11 μ1^2 + 4 μ2 + 11 μ1 (1 + 4 μ2)) + θp
              (2 × (27 - 99 μ1^2 + 343 μ2 + 632 μ2^2 + 9 μ1 (-8 + 15 μ2)) +
              4 ηt (24 + 20 μ1^2 + 63 μ2 - 14 μ2^2 + μ1 (44 + 79 μ2)) +
              θl (82 - 8 μ2^2 (-32 + 25 Φ2) + μ2 (282 + 20 Φ1 + 40 Φ2) +
                μ1^2 (524 + 17 Φ1 + 67 Φ2) + μ1 (606 + 17 Φ1 - 22 μ2 (-63 + 2 Φ1 -
                        8 Φ2) + 67 Φ2)) - ηt θl (82 - 8 μ2^2 (-32 + 25 Φ2) +
                μ2 (282 + 20 Φ1 + 40 Φ2) + μ1^2 (524 + 17 Φ1 + 67 Φ2) +
                μ1 (606 + 17 Φ1 - 22 μ2 (-63 + 2 Φ1 - 8 Φ2) + 67 Φ2)))) + η
          (ηt θp (46 + 38 μ1^2 + 17 μ2 - 36 μ2^2 + 7 μ1 (12 + 7 μ2)) -
            (-1 + ηt) θl (6 + 12 μ1 + 6 μ1^2 - 5 μ2 - 5 μ1 μ2 - 4 μ2^2 +
              2 θp (-6 + 7 Φ1 + 3 μ2 (-2 + 5 Φ1 - Φ2) - 3 Φ2 +
                μ1 (14 Φ1 + 3 μ2 (-2 + 5 Φ1 - Φ2) - 6 × (2 + Φ2)) +
                μ1^2 (7 Φ1 - 3 × (2 + Φ2)) + μ2^2 (6 Φ1 - 2 × (2 + Φ2))))) +
        η^5 (4 × (-1 + ηt) θl μ1 (9 + 9 μ1 + 28 μ2) + θp (-70 + 236 μ1 +
              306 μ1^2 - 126 μ2 + 706 μ1 μ2 + 320 μ2^2 +
              4 ηt (-16 + 36 μ1^2 - 7 μ2 + 70 μ2^2 + μ1 (20 + 137 μ2)) +
              θl (56 + 166 μ2 + 48 μ2 Φ2 + 45 μ1^2 (6 + Φ1 + Φ2) +
                μ1 (326 + 45 Φ1 + 45 Φ2 + 2 μ2 (303 + 70 Φ1 + 70 Φ2)) -
              ηt θl (56 + 166 μ2 + 48 μ2 Φ2 + 45 μ1^2 (6 + Φ1 + Φ2) +
                μ1 (326 + 45 Φ1 + 45 Φ2 + 2 μ2 (303 + 70 Φ1 + 70 Φ2)))))) +
  w^3 (-1 + η)^3 (6 x^7 (-1 + η)^8 θp (η - ηt + 4 μ1) (3 + 3 μ1 + 4 μ2) -
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$$
\begin{aligned}
& x^6 (-1+\eta)^6 \Big(6 \times (-1+\eta)\, \theta p \big(29 + 101\,\mu1 + 72\,\mu1^2 + 87\,\mu2 + 119\,\mu1\,\mu2 + \\
& \quad 7\,\eta^2 (3 + 3\,\mu1 + 4\,\mu2) + \eta t \left(-17 - 17\,\mu1 - 18\,\mu2 + 10\,\mu1\,\mu2 + 28\,\mu2^2\right) + \\
& \quad \eta \big(17 + 101\,\mu1 + 84\,\mu1^2 + 18\,\mu2 + 102\,\mu1\,\mu2 - \\
& \qquad 28\,\mu2^2 - 7\,\eta t (3 + 3\,\mu1 + 4\,\mu2)\big)\big) - (-1+\eta t)\, \theta l \\
& \quad \big(28 - 52\,\mu1 - 80\,\mu1^2 + 11\,\mu2 - 325\,\mu1\,\mu2 + 8\,\mu2^2 + \theta p \big(146 + 5\,\Phi1 + \\
& \qquad \mu2^2 (48 - 88\,\Phi2) + 3\,\mu2 (170 + 5\,\Phi1 - \Phi2) - 5\,\Phi2 + 6\,\mu1 (49 + \Phi1 + \Phi2) + \\
& \qquad \mu1^2 (148 + \Phi1 + 11\,\Phi2) + \mu1\,\mu2 (462 - 25\,\Phi1 + 45\,\Phi2)\big)\big)\big) + \\
& \eta\, \theta p \Big(-6\,\eta^8 (3 + 3\,\mu1 + 4\,\mu2) + 3\,\eta t\,\mu2 (11 + 11\,\mu1 + 8\,\mu2) - 3\,\eta\,\eta t \\
& \quad \left(4 + 28\,\mu1^2 + \mu1 (32 - 75\,\mu2) - 75\,\mu2 - 80\,\mu2^2\right) - 2\,\eta^6 \\
& \quad \big(123 + 180\,\mu1^2 + 251\,\mu2 - 324\,\mu2^2 + 3\,\mu1 (101 + 73\,\mu2) + \\
& \qquad 6\,\eta t \left(-7 - 7\,\mu2 + 14\,\mu2^2 + \mu1 (-7 + 5\,\mu2)\right)\big) + 6\,\eta^7 \\
& \quad \big(\eta t (3 + 3\,\mu1 + 4\,\mu2) - 2 \times \left(6\,\mu1^2 + \mu1 (13 + 3\,\mu2) + 7 \times \left(1 + \mu2 - 2\,\mu2^2\right)\right)\big)\Big) + \\
& \quad \eta^5 \Big(-4 \times \left(59 + 99\,\mu1^2 + 267\,\mu2 + 110\,\mu2^2 + \mu1 (158 + 291\,\mu2)\right) - \\
& \qquad \theta l \big(162 + 9\,\Phi1 + 4\,\mu2^2 (14 + 3\,\Phi1 - 19\,\Phi2) - \Phi2 + 2\,\mu1 (163 + 9\,\Phi1 + 9\,\Phi2) + \\
& \qquad \mu2 (582 + 31\,\Phi1 + 13\,\Phi2) + \mu1^2 (164 + 9\,\Phi1 + 19\,\Phi2) + \\
& \qquad \mu1\,\mu2 (534 + 7\,\Phi1 + 77\,\Phi2)\big) + \eta t \big(84 - 72\,\mu1 - 156\,\mu1^2 - 21\,\mu2 - \\
& \qquad 813\,\mu1\,\mu2 - 352\,\mu2^2 + \theta l \big(162 + 9\,\Phi1 + 4\,\mu2^2 (14 + 3\,\Phi1 - 19\,\Phi2) - \\
& \qquad\quad \Phi2 + 2\,\mu1 (163 + 9\,\Phi1 + 9\,\Phi2) + \mu2 (582 + 31\,\Phi1 + 13\,\Phi2) + \\
& \qquad\quad \mu1^2 (164 + 9\,\Phi1 + 19\,\Phi2) + \mu1\,\mu2 (534 + 7\,\Phi1 + 77\,\Phi2)\big)\big)\big) + \eta^4 \\
& \quad \big(178 + 394\,\mu1 + 52\,\eta t\,\mu1 + 216\,\mu1^2 + 52\,\eta t\,\mu1^2 + 28\,\mu2 - 229\,\eta t\,\mu2 - \\
& \qquad 172\,\mu1\,\mu2 - 509\,\eta t\,\mu1\,\mu2 - 1112\,\mu2^2 - 120\,\eta t\,\mu2^2 + \\
& \qquad (-1+\eta t)\, \theta l \big(398 + 69\,\Phi1 + 4\,\mu2^2 (82 + 33\,\Phi1 - 37\,\Phi2) + 19\,\Phi2 + \\
& \qquad \mu1^2 (440 + 51\,\Phi1 + 61\,\Phi2) + \mu2 (1546 + 235\,\Phi1 + 129\,\Phi2) + \\
& \qquad \mu1 (838 + 120\,\Phi1 + 80\,\Phi2 + \mu2 (1594 + 107\,\Phi1 + 281\,\Phi2))\big)\big) + \eta^3 \\
& \quad \big(4 \times \left(80 + 197\,\mu1 + 117\,\mu1^2 + 308\,\mu2 + 320\,\mu1\,\mu2 + 124\,\mu2^2\right) - \\
& \qquad \theta l \big(310 + 111\,\Phi1 + 4\,\mu2^2 (122 + 57\,\Phi1 - 17\,\Phi2) + 41\,\Phi2 + \\
& \qquad\quad 2\,\mu1 (349 + 93\,\Phi1 + 53\,\Phi2) + \mu1^2 (388 + 75\,\Phi1 + 65\,\Phi2) + \\
& \qquad\quad \mu2 (1346 + 377\,\Phi1 + 219\,\Phi2) + \mu1\,\mu2 (1586 + 193\,\Phi1 + 331\,\Phi2)\big) + \\
& \qquad \eta t \big(-90 + 230\,\mu1 + 320\,\mu1^2 - 228\,\mu2 + 812\,\mu1\,\mu2 + 112\,\mu2^2 + \\
& \qquad\quad \theta l \big(310 + 111\,\Phi1 + 4\,\mu2^2 (122 + 57\,\Phi1 - 17\,\Phi2) + 41\,\Phi2 + \\
& \qquad\qquad 2\,\mu1 (349 + 93\,\Phi1 + 53\,\Phi2) + \mu1^2 (388 + 75\,\Phi1 + 65\,\Phi2) + \mu2 \\
& \qquad\qquad\quad (1346 + 377\,\Phi1 + 219\,\Phi2) + \mu1\,\mu2 (1586 + 193\,\Phi1 + 331\,\Phi2)\big)\big)\big) + \\
& \quad \eta^2 \Big(86 + 230\,\mu1 + 144\,\mu1^2 + 418\,\mu2 + 530\,\mu1\,\mu2 + 240\,\mu2^2 - \\
& \qquad \theta l \big(74 + 51\,\Phi1 + 21\,\Phi2 + 4\,\mu2^2 (54 + 27\,\Phi1 + \Phi2) + \\
& \qquad \mu1^2 (112 + 33\,\Phi1 + 23\,\Phi2) + \mu2 (382 + 173\,\Phi1 + 103\,\Phi2) + \\
& \qquad \mu1 (186 + 84\,\Phi1 + 44\,\Phi2 + \mu2 (526 + 93\,\Phi1 + 127\,\Phi2))\big) + \\
& \qquad \eta t \big(-4 \times \left(21 + 33\,\mu1^2 + \mu1 (54 - 78\,\mu2) - 28\,\mu2 - 66\,\mu2^2\right) + \\
& \qquad\quad \theta l \big(74 + 51\,\Phi1 + 21\,\Phi2 + 4\,\mu2^2 (54 + 27\,\Phi1 + \Phi2) + \\
& \qquad\quad\quad \mu1^2 (112 + 33\,\Phi1 + 23\,\Phi2) + \mu2 (382 + 173\,\Phi1 + 103\,\Phi2) + \\
& \qquad\quad\quad \mu1 (186 + 84\,\Phi1 + 44\,\Phi2 + \mu2 (526 + 93\,\Phi1 + 127\,\Phi2))\big)\big)\big)\big) + \\
& x^5 (-1+\eta)^5 \Big((-1+\eta)\, \theta p \big(126\,\eta^3 (3 + 3\,\mu1 + 4\,\mu2) + \eta t \big(-190 + \\
& \qquad 144\,\mu1^2 - 103\,\mu2 + 508\,\mu2^2 + \mu1 (-46 + 633\,\mu2)\big) + \\
& \qquad 2 \times \left(235 + 414\,\mu1^2 + 801\,\mu2 + 312\,\mu2^2 + \mu1 (649 + 905\,\mu2)\right) +
\end{aligned}
$$

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\begin{aligned}
&2\,\eta\,\big(609+1296\,\mu1^2+1610\,\mu2-408\,\mu2^2+3\,\mu1\,(635+674\,\mu2)+\\
&\quad 18\,\eta t\,\big(-17-18\,\mu2+28\,\mu2^2+\mu1\,(-17+10\,\mu2)\big)\big)-\\
&18\,\eta^2\,\big(7\,\eta t\,(3+3\,\mu1+4\,\mu2)-2\times\big(17+42\,\mu1^2+18\,\mu2-\\
&\quad 28\,\mu2^2+\mu1\,(59+46\,\mu2)\big)\big)\big)-(-1+\eta t)\,\theta l\\
&\big(-2\times\big(-52+20\,\mu1^2+53\,\mu2+100\,\mu2^2+\mu1\,(-32+261\,\mu2)\big)+\\
&\theta p\,\big(366+61\,\Phi1+4\,\mu2^2\,(78+27\,\Phi1-43\,\Phi2)+11\,\Phi2+\\
&\quad \mu1^2\,(408+35\,\Phi1+45\,\Phi2)+\mu2\,(1402+203\,\Phi1+97\,\Phi2)+\\
&\quad \mu1\,(774+96\,\Phi1+56\,\Phi2+\mu2\,(1450+43\,\Phi1+217\,\Phi2))\big)+\\
&\eta\,\big(136-276\,\mu1-412\,\mu1^2+39\,\mu2-1865\,\mu1\,\mu2+28\,\mu2^2+\\
&\quad 2\,\theta p\,\big(446+17\,\Phi1+2\,\mu2^2\,(74+3\,\Phi1-129\,\Phi2)+\\
&\quad \mu2\,(1566+53\,\Phi1-\Phi2)-13\,\Phi2+\mu1^2\,(452+7\,\Phi1+37\,\Phi2)+\\
&\quad \mu1\,(898+24\,\Phi1+24\,\Phi2+\mu2\,(1422-59\,\Phi1+151\,\Phi2))\big)\big)\big)\big)+\\
&x^4\,(-1+\eta)^4\,\big(-\big((-1+\eta)\,\theta p\,\big(210\,\eta^4\,(3+3\,\mu1+4\,\mu2)-30\,\eta^3\,\big(-51-135\\
&\quad \mu1-84\,\mu1^2-54\,\mu2-82\,\mu1\,\mu2+84\,\mu2^2+7\,\eta t\,(3+3\,\mu1+4\,\mu2)\big)+\\
&\quad 10\,\eta^2\,\big(348+996\,\mu1+648\,\mu1^2+827\,\mu2+951\,\mu1\,\mu2-408\,\mu2^2+\\
&\quad 9\,\eta t\,\big(-17-17\,\mu1-18\,\mu2+10\,\mu1\,\mu2+28\,\mu2^2\big)\big)+\\
&\quad 2\times\big(191+497\,\mu1+306\,\mu1^2+789\,\mu2+901\,\mu1\,\mu2+496\,\mu2^2+\\
&\quad \eta t\,\big(-85+61\,\mu1+146\,\mu1^2+103\,\mu2+527\,\mu1\,\mu2+344\,\mu2^2\big)\big)+\\
&\quad \eta\,\big(2464+6604\,\mu1+4140\,\mu1^2+8086\,\mu2+8878\,\mu1\,\mu2+2120\,\mu2^2+\eta t\\
&\quad \big(-946-214\,\mu1+732\,\mu1^2-499\,\mu2+3405\,\mu1\,\mu2+2552\,\mu2^2\big)\big)\big)\big)+\\
&(-1+\eta t)\,\theta l\,\big(88+292\,\mu1+204\,\mu1^2-342\,\mu2-294\,\mu1\,\mu2-448\,\mu2^2+\\
&\theta p\,\big(294+107\,\Phi1+8\,\mu2^2\,(60+27\,\Phi1-10\,\Phi2)+37\,\Phi2+\\
&\quad \mu1^2\,(372+67\,\Phi1+57\,\Phi2)+\mu2\,(1274+361\,\Phi1+203\,\Phi2)+\\
&\quad \mu1\,(666+174\,\Phi1+94\,\Phi2+\mu2\,(1514+161\,\Phi1+299\,\Phi2))\big)+\\
&\eta^2\,\big(264-584\,\mu1-848\,\mu1^2+46\,\mu2-4210\,\mu1\,\mu2+32\,\mu2^2+\\
&\quad 5\,\theta p\,\big(454+19\,\Phi1+4\,\mu2^2\,(38+3\,\Phi1-63\,\Phi2)-11\,\Phi2+\\
&\quad \mu2\,(1602+61\,\Phi1+7\,\Phi2)+\mu1^2\,(460+11\,\Phi1+41\,\Phi2)+\\
&\quad \mu1\,(914+30\,\Phi1+30\,\Phi2+\mu2\,(1458-43\,\Phi1+167\,\Phi2))\big)\big)+\\
&\eta\,\big(4\times\big(108+115\,\mu1+7\,\mu1^2-90\,\mu2-604\,\mu1\,\mu2-188\,\mu2^2\big)+\\
&\quad \theta p\,\big(1862+313\,\Phi1+4\,\mu2^2\,(394+141\,\Phi1-209\,\Phi2)+63\,\Phi2+\\
&\quad \mu1^2\,(2072+191\,\Phi1+241\,\Phi2)+\mu2\,(7154+1047\,\Phi1+517\,\Phi2)+\mu1\\
&\quad (3934+504\,\Phi1+304\,\Phi2+\mu2\,(7394+279\,\Phi1+1149\,\Phi2))\big)\big)\big)\big)-\\
&x^3\,(-1+\eta)^3\,\big(-2\times(-1+\eta)\,\theta p\,\big(43+115\,\mu1+72\,\mu1^2+209\,\mu2+\\
&\quad 265\,\mu1\,\mu2+120\,\mu2^2+105\,\eta^5\,(3+3\,\mu1+4\,\mu2)+\\
&\quad \eta t\,\big(-20+40\,\mu1^2+297\,\mu2+348\,\mu2^2+\mu1\,(20+373\,\mu2)\big)-\\
&\quad 15\,\eta^4\,\big(7\,\eta t\,(3+3\,\mu1+4\,\mu2)-\\
&\quad 4\times\big(17+21\,\mu1^2+18\,\mu2-28\,\mu2^2+2\,\mu1\,(19+9\,\mu2)\big)\big)+\\
&\quad 10\,\eta^3\,\big(261+432\,\mu1^2+566\,\mu2-408\,\mu2^2+99\,\mu1\,(7+6\,\mu2)+\\
&\quad 6\,\eta t\,\big(-17-18\,\mu2+28\,\mu2^2+\mu1\,(-17+10\,\mu2)\big)\big)+\\
&\quad \eta^2\,\big(2578+4140\,\mu1^2+8162\,\mu2+1120\,\mu2^2+\mu1\,(6718+8706\,\mu2)+\\
&\quad \eta t\,\big(-942+744\,\mu1^2-483\,\mu2+2564\,\mu2^2+9\,\mu1\,(-22+405\,\mu2)\big)\big)+\\
&\quad 2\,\eta\,\big(4\times\big(97+153\,\mu1^2+399\,\mu2+232\,\mu2^2+\mu1\,(250+451\,\mu2)\big)+\\
&\quad \eta t\,\big(245\,\mu1^2+71\,\mu1\,(1+16\,\mu2)+2\times\big(-87+95\,\mu2+338\,\mu2^2\big)\big)\big)\big)+
\end{aligned}
$$

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(-1 + ηt) θl (6 × (2 + 14 μ1^2 + μ1 (16 - 43 μ2) - 43 μ2 - 44 μ2^2) +
    2 η^3 (128 - 308 μ1 - 436 μ1^2 + 7 μ2 - 2345 μ1 μ2 + 4 μ2^2 +
        10 θp (154 + 7 Φ1 + μ2^2 (52 + 6 Φ1 - 82 Φ2) - 3 Φ2 +
            μ2 (546 + 23 Φ1 + 5 Φ2) + 2 μ1 (155 + 6 Φ1 + 6 Φ2) +
            μ1^2 (156 + 5 Φ1 + 15 Φ2) + μ1 μ2 (498 - 9 Φ1 + 61 Φ2))) +
    θp (74 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (54 + 27 Φ1 + Φ2) + μ1^2
          (112 + 33 Φ1 + 23 Φ2) + μ2 (382 + 173 Φ1 + 103 Φ2) +
        μ1 (186 + 84 Φ1 + 44 Φ2 + μ2 (526 + 93 Φ1 + 127 Φ2))) +
    2 η (160 + 614 μ1 + 454 μ1^2 - 401 μ2 - 353 μ1 μ2 - 588 μ2^2 +
        2 θp (298 + 108 Φ1 + μ2^2 (482 + 219 Φ1 - 77 Φ2) + 38 Φ2 +
            μ1^2 (376 + 69 Φ1 + 59 Φ2) + μ2 (1292 + 365 Φ1 + 207 Φ2) +
            μ1 (674 + 177 Φ1 + 97 Φ2 + μ2 (1532 + 169 Φ1 + 307 Φ2)))) +
    2 η^2 (6 × (56 + 27 μ1^2 + μ1 (83 - 343 μ2) - 37 μ2 - 88 μ2^2) +
        θp (1894 + 321 Φ1 + 4 μ2^2 (398 + 147 Φ1 - 203 Φ2) + 71 Φ2 +
            μ1^2 (2104 + 207 Φ1 + 257 Φ2) + μ2 (7298 + 1079 Φ1 + 549 Φ2) + μ1
              (3998 + 528 Φ1 + 328 Φ2 + μ2 (7538 + 343 Φ1 + 1213 Φ2))))))) -
x^2 (-1 + η)^2 (126 η^7 θp (3 + 3 μ1 + 4 μ2) - 3 θl μ2 (11 + 11 μ1 + 8 μ2) +
    3 ηt θl μ2 (11 + 11 μ1 + 8 μ2) - 6 ηt θp
      (6 + 4 μ1^2 + 75 μ2 + 68 μ2^2 + μ1 (10 + 79 μ2)) + 2 η^5 θp
      (2484 μ1^2 + 33 μ1 (118 + 109 μ2) + 5 × (282 + 709 μ2 - 564 μ2^2) +
        18 ηt (-32 - 31 μ2 + 70 μ2^2 + μ1 (-32 + 25 μ2))) - 18 η^6 θp (7 ηt
         (3 + 3 μ1 + 4 μ2) - 2 × (32 + 42 μ1^2 + 31 μ2 - 70 μ2^2 + μ1 (74 + 31 μ2))) -
    2 η^2 (θp (3 × (351 + 540 μ1^2 + 1405 μ2 + 744 μ2^2 + μ1 (891 + 1541 μ2)) +
            ηt (-446 + 622 μ1^2 - 257 μ2 + 1032 μ2^2 + μ1 (176 + 2623 μ2))) +
        (-1 + ηt) θl (188 + 790 μ1 + 602 μ1^2 - 289 μ2 - 265 μ1 μ2 -
            504 μ2^2 + 3 θp (302 + 109 Φ1 + μ2^2 (484 + 222 Φ1 - 74 Φ2) + 39 Φ2 +
                2 μ1 (341 + 90 Φ1 + 50 Φ2) + μ1^2 (380 + 71 Φ1 + 61 Φ2) + μ2
                  (1310 + 369 Φ1 + 211 Φ2) + μ1 μ2 (1550 + 177 Φ1 + 315 Φ2)))) -
    η (-4 ηt θp (53 + 20 μ1^2 + μ1 (73 - 397 μ2) - 277 μ2 - 378 μ2^2) +
        6 θp (43 + 72 μ1^2 + 209 μ2 + 120 μ2^2 + 5 μ1 (23 + 53 μ2)) +
        3 × (-1 + ηt) θl (4 × (6 + 23 μ1^2 + μ1 (29 - 25 μ2) - 27 μ2 - 32 μ2^2) +
            θp (74 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (54 + 27 Φ1 + Φ2) +
                μ1^2 (112 + 33 Φ1 + 23 Φ2) + μ2 (382 + 173 Φ1 + 103 Φ2) +
                μ1 (186 + 84 Φ1 + 44 Φ2 + μ2 (526 + 93 Φ1 + 127 Φ2)))) + η^4
      (2 θp (517 + 900 μ1^2 + 3883 μ2 + 4200 μ2^2 + μ1 (1417 + 4379 μ2) +
            ηt (-173 + 756 μ1^2 + 343 μ2 + 1316 μ2^2 + μ1 (583 + 3435 μ2))) -
        (-1 + ηt) θl (124 - 324 μ1 - 448 μ1^2 - 9 μ2 - 2585 μ1 μ2 -
            8 μ2^2 + 5 θp (470 + 23 Φ1 + 8 μ2^2 (20 + 3 Φ1 - 30 Φ2) - 7 Φ2 +
                μ2 (1674 + 77 Φ1 + 23 Φ2) + μ1^2 (476 + 19 Φ1 + 49 Φ2) +
                μ1 (946 + 42 Φ1 + 42 Φ2 + μ2 (1530 - 11 Φ1 + 199 Φ2)))) - 2 η^3
      (θp (1510 + 2304 μ1^2 + 3396 μ2 - 2472 μ2^2 + μ1 (3814 + 3116 μ2) +
            ηt (-404 + 162 μ1^2 - 989 μ2 + 584 μ2^2 + 11 μ1 (-22 + 21 μ2))) +
        (-1 + ηt) θl (2 × (116 + 217 μ1 + 101 μ1^2 - 58 μ2 - 768 μ1 μ2 - 164 μ2^2) +
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$$\theta p\,(1926 + 329\,\Phi 1 + 4\,\mu 2^2\,(402 + 153\,\Phi 1 - 197\,\Phi 2) + 79\,\Phi 2 + \mu 1^2\,(2136 + 223\,\Phi 1 + 273\,\Phi 2) + \mu 2\,(7442 + 1111\,\Phi 1 + 581\,\Phi 2) + \mu 1\,(4062 + 552\,\Phi 1 + 352\,\Phi 2 + \mu 2\,(7682 + 407\,\Phi 1 + 1277\,\Phi 2)))))) +$$

$$x\,(-1+\eta) \times (42\,\eta^8\,\theta p\,(3 + 3\,\mu 1 + 4\,\mu 2) - 3\,\eta t\,\theta p\,(4 + 4\,\mu 1^2 + 27\,\mu 2 + 20\,\mu 2^2 + \mu 1\,(8 + 27\,\mu 2)) - 6\,\eta^7\,\theta p\,(-81 - 84\,\mu 1^2 - 80\,\mu 2 + 168\,\mu 2^2 + 7\,\eta t\,(3 + 3\,\mu 1 + 4\,\mu 2) - \mu 1\,(165 + 52\,\mu 2)) + 2\,\eta^6\,\theta p\,(651 + 1044\,\mu 1^2 + 1462\,\mu 2 - 1536\,\mu 2^2 + 3\,\mu 1\,(565 + 462\,\mu 2) + 3\,\eta t\,(-81 - 80\,\mu 2 + 168\,\mu 2^2 + \mu 1\,(-81 + 60\,\mu 2)) - 3\,\eta\,((-1+\eta t)\,\theta l\,(4 + 4\,\mu 1^2 + 5\,\mu 2 + 4\,\mu 2^2 + \mu 1\,(8 + 5\,\mu 2)) + \eta t\,\theta p\,(4 - 24\,\mu 1^2 + 209\,\mu 2 + 204\,\mu 2^2 + \mu 1\,(-20 + 217\,\mu 2))) - \eta^2\,(2\,\theta p\,(3 \times (43 + 72\,\mu 1^2 + 209\,\mu 2 + 120\,\mu 2^2 + 5\,\mu 1\,(23 + 53\,\mu 2)) + \eta t\,(-128 - 146\,\mu 1^2 + 313\,\mu 2 + 540\,\mu 2^2 + \mu 1\,(-274 + 577\,\mu 2))) + 3 \times (-1+\eta t)\,\theta l\,(20 + 84\,\mu 1 + 64\,\mu 1^2 - 22\,\mu 2 - 14\,\mu 1\,\mu 2 - 40\,\mu 2^2 + \theta p\,(74 + 51\,\Phi 1 + 21\,\Phi 2 + 4\,\mu 2^2\,(54 + 27\,\Phi 1 + \Phi 2) + \mu 1^2\,(112 + 33\,\Phi 1 + 23\,\Phi 2) + \mu 2\,(382 + 173\,\Phi 1 + 103\,\Phi 2) + \mu 1\,(186 + 84\,\Phi 1 + 44\,\Phi 2 + \mu 2\,(526 + 93\,\Phi 1 + 127\,\Phi 2))))) + \eta^5\,(\theta p\,(892 + 1548\,\mu 1^2 + 4742\,\mu 2 + 3200\,\mu 2^2 + \mu 1\,(2440 + 5278\,\mu 2) + \eta t\,(-322 + 768\,\mu 1^2 + 197\,\mu 2 + 1580\,\mu 2^2 + \mu 1\,(446 + 3765\,\mu 2))) - (-1+\eta t)\,\theta l\,(24 - 68\,\mu 1 - 92\,\mu 1^2 - 5\,\mu 2 - 565\,\mu 1\,\mu 2 - 4\,\mu 2^2 + 2\,\theta p\,(478 + 25\,\Phi 1 + 2\,\mu 2^2\,(82 + 15\,\Phi 1 - 117\,\Phi 2) - 5\,\Phi 2 + \mu 2\,(1710 + 85\,\Phi 1 + 31\,\Phi 2) + \mu 1^2\,(484 + 23\,\Phi 1 + 53\,\Phi 2) + \mu 1\,(962 + 48\,\Phi 1 + 48\,\Phi 2 + \mu 2\,(1566 + 5\,\Phi 1 + 215\,\Phi 2))))) - 2\,\eta^3\,(\theta p\,(671 + 1008\,\mu 1^2 + 2637\,\mu 2 + 1240\,\mu 2^2 + \mu 1\,(1679 + 2821\,\mu 2) + \eta t\,(-248 + 478\,\mu 1^2 - 351\,\mu 2 + 428\,\mu 2^2 + \mu 1\,(230 + 1657\,\mu 2))) + (-1+\eta t)\,\theta l\,(72 + 322\,\mu 1 + 250\,\mu 1^2 - 59\,\mu 2 - 59\,\mu 1\,\mu 2 - 140\,\mu 2^2 + 2\,\theta p\,(306 + 110\,\Phi 1 + \mu 2^2\,(486 + 225\,\Phi 1 - 71\,\Phi 2) + 40\,\Phi 2 + \mu 1^2\,(384 + 73\,\Phi 1 + 63\,\Phi 2) + \mu 2\,(1328 + 373\,\Phi 1 + 215\,\Phi 2) + \mu 1\,(690 + 183\,\Phi 1 + 103\,\Phi 2 + \mu 2\,(1568 + 185\,\Phi 1 + 323\,\Phi 2))))) + \eta^4\,(\theta p\,(-2 \times (603 + 846\,\mu 1^2 + 893\,\mu 2 - 2040\,\mu 2^2 + \mu 1\,(1449 + 565\,\mu 2)) + \eta t\,(206 - 164\,\mu 1^2 + 1083\,\mu 2 + 20\,\mu 2^2 + \mu 1\,(42 + 1075\,\mu 2))) - (-1+\eta t)\,\theta l\,(2 \times (60 + 74\,\mu 1^2 + \mu 1\,(134 - 425\,\mu 2) - 21\,\mu 2 - 76\,\mu 2^2) + \theta p\,(1958 + 337\,\Phi 1 + 4\,\mu 2^2\,(406 + 159\,\Phi 1 - 191\,\Phi 2) + 87\,\Phi 2 + \mu 1^2\,(2168 + 239\,\Phi 1 + 289\,\Phi 2) + \mu 2\,(7586 + 1143\,\Phi 1 + 613\,\Phi 2) + \mu 1\,(4126 + 576\,\Phi 1 + 376\,\Phi 2 + \mu 2\,(7826 + 471\,\Phi 1 + 1341\,\Phi 2)))))))) +$$

$$w^2\,(-1+\eta)^2\,(2\,x^8\,(-1+\eta)^9\,\theta p\,(\eta - \eta t + 4\,\mu 1)\,(3 + 3\,\mu 1 + 4\,\mu 2) - x^7\,(-1+\eta)^7\,(4 \times (-1+\eta t)\,\theta l\,(11\,\mu 1^2 + 4\,\mu 2 + 11\,\mu 1\,(1 + 4\,\mu 2)) + \theta p\,(-138 + 138\,\theta l - 438\,\mu 1 + 268\,\theta l\,\mu 1 - 300\,\mu 1^2 + 130\,\theta l\,\mu 1^2 - 414\,\mu 2 + 438\,\theta l\,\mu 2 - 478\,\mu 1\,\mu 2 + 326\,\theta l\,\mu 1\,\mu 2 + 48\,\theta l\,\mu 2^2 + 16\,\eta^3\,(3 + 3\,\mu 1 + 4\,\mu 2) + \eta^2\,(30 + 192\,\mu 1^2 + 52\,\mu 2 - 56\,\mu 2^2 - 16\,\eta t\,(3 + 3\,\mu 1 + 4\,\mu 2) + \mu 1\,(222 + 236\,\mu 2)) + 2\,\eta\,(30 + 54\,\mu 1^2 + 149\,\mu 2 + 28\,\mu 2^2 + \mu 1\,(84 + 121\,\mu 2) + \eta t\,(-15 - 26\,\mu 2 + 28\,\mu 2^2 + 5\,\mu 1\,(-3 + 2\,\mu 2)) + \theta l\,\mu 1\,\Phi 1 + \theta l\,\mu 1^2\,\Phi 1 + 4\,\theta l\,\mu 2\,\Phi 1 - 12\,\theta l\,\mu 1\,\mu 2\,\Phi 1 + 11\,\theta l\,\mu 1\,\Phi 2 +$$

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        11 θl μ1^2 Φ2 + 16 θl μ2 Φ2 + 32 θl μ1 μ2 Φ2 - 40 θl μ2^2 Φ2 -
        ηt (-78 - 78 μ1 - 116 μ2 + 20 μ1 μ2 + 56 μ2^2 + θl (138 - 8 μ2^2
              (-6 + 5 Φ2) + 2 μ2 (219 + 2 Φ1 + 8 Φ2) + μ1^2 (130 + Φ1 + 11 Φ2) +
            μ1 (268 + Φ1 + 11 Φ2 + μ2 (326 - 12 Φ1 + 32 Φ2)))))) +
x^6 (-1 + η)^6 (2 × (-1 + η) θp (195 + 603 μ1 + 408 μ1^2 + 609 μ2 +
        793 μ1 μ2 + 216 μ2^2 + 28 η^3 (3 + 3 μ1 + 4 μ2) +
        ηt (-93 - 61 μ1 + 32 μ1^2 - 92 μ2 + 184 μ1 μ2 + 196 μ2^2) - 7 η^2 (-39 -
            87 μ1 - 48 μ1^2 - 58 μ2 - 54 μ1 μ2 + 28 μ2^2 + 4 ηt (3 + 3 μ1 + 4 μ2)) +
        η (588 + 1638 μ1 + 1050 μ1^2 + 1569 μ2 + 1573 μ1 μ2 - 304 μ2^2 +
            7 ηt (-39 - 39 μ1 - 58 μ2 + 10 μ1 μ2 + 28 μ2^2))) -
    (-1 + ηt) θl (84 - 16 μ1 - 332 η μ1 - 100 μ1^2 - 332 η μ1^2 +
        49 μ2 - 96 η μ2 - 415 μ1 μ2 - 1296 η μ1 μ2 + 24 μ2^2 +
        θp (306 + 1074 μ2 + 208 μ2^2 + 15 Φ1 + 45 μ2 Φ1 - 15 Φ2 - 9 μ2 Φ2 -
            264 μ2^2 Φ2 + μ1^2 (424 - 7 Φ1 + 23 Φ2) + μ1 (730 + 8 Φ1 + 8 Φ2 +
                μ2 (1250 - 131 Φ1 + 79 Φ2)) + 2 η (495 - 20 μ2^2 (-8 + 7 Φ2) +
                2 μ2 (792 + 7 Φ1 + 28 Φ2) + μ1^2 (468 + 10 Φ1 + 45 Φ2) +
                μ1 (963 + 10 Φ1 + 45 Φ2 + μ2 (1188 - 20 Φ1 + 134 Φ2)))))) +
η θp (η^9 (6 + 6 μ1 + 8 μ2) - ηt μ2 (11 + 11 μ1 + 8 μ2) - η ηt
      (24 + 267 μ2 + 224 μ2^2 + 3 μ1 (8 + 89 μ2)) + η^8
      (-2 ηt (3 + 3 μ1 + 4 μ2) + 4 × (18 + 6 μ1^2 + 27 μ2 - 14 μ2^2 + 3 μ1 (8 + μ2))) +
    2 η^7 (135 + 138 μ1^2 + 269 μ2 - 276 μ2^2 + 7 μ1 (39 + 19 μ2) +
        2 ηt (-18 - 27 μ2 + 14 μ2^2 + μ1 (-18 + 5 μ2))) - 2 η^6
      (-2 × (63 + 129 μ1^2 + 199 μ2 - 38 μ2^2 + μ1 (192 + 259 μ2)) -
        θl (81 + 2 μ2 (135 + Φ1 + 4 Φ2) - 4 μ2^2 (-4 + 5 Φ2) + μ1^2 (78 + 7 Φ1 +
              12 Φ2) + μ1 (159 + 7 Φ1 + 12 Φ2 + 2 μ2 (105 + 8 Φ1 + 19 Φ2))) +
        ηt (54 - 66 μ1^2 + 34 μ2 - 168 μ2^2 - 6 μ1 (2 + 49 μ2) + θl (81 + 2 μ2
              (135 + Φ1 + 4 Φ2) - 4 μ2^2 (-4 + 5 Φ2) + μ1^2 (78 + 7 Φ1 + 12 Φ2) +
              μ1 (159 + 7 Φ1 + 12 Φ2 + 2 μ2 (105 + 8 Φ1 + 19 Φ2))))) +
    η^5 (2 × (-45 + 42 μ1^2 + 200 μ2 + 732 μ2^2 + μ1 (-3 + 508 μ2)) +
        3 θl (126 + 9 Φ1 + 4 μ2^2 (18 + 3 Φ1 - 19 Φ2) - Φ2 +
            2 μ1^2 (83 + 5 Φ1 + 10 Φ2) + μ2 (464 + 31 Φ1 + 13 Φ2) +
            μ1 (292 + 19 Φ1 + 19 Φ2 + μ2 (520 + 3 Φ1 + 73 Φ2))) -
        ηt (36 - 108 μ1 - 144 μ1^2 - 119 μ2 - 911 μ1 μ2 - 160 μ2^2 +
            3 θl (126 + 9 Φ1 + 4 μ2^2 (18 + 3 Φ1 - 19 Φ2) - Φ2 +
                2 μ1^2 (83 + 5 Φ1 + 10 Φ2) + μ2 (464 + 31 Φ1 + 13 Φ2) +
                μ1 (292 + 19 Φ1 + 19 Φ2 + μ2 (520 + 3 Φ1 + 73 Φ2))))) -
    η^3 (186 + 360 μ1^2 + 882 μ2 + 688 μ2^2 + 42 μ1 (13 + 29 μ2) -
        3 θl (58 + 43 Φ1 + 4 μ2^2 (46 + 21 Φ1 - 5 Φ2) + 13 Φ2 +
            2 μ1^2 (49 + 13 Φ1 + 8 Φ2) + μ2 (312 + 141 Φ1 + 71 Φ2) +
            μ1 (156 + 69 Φ1 + 29 Φ2 + μ2 (448 + 57 Φ1 + 91 Φ2))) +
        ηt (4 × (-33 + 20 μ1^2 - 64 μ2 - 2 μ2^2 + μ1 (-13 + 110 μ2)) +
            3 θl (58 + 43 Φ1 + 4 μ2^2 (46 + 21 Φ1 - 5 Φ2) + 13 Φ2 +
                2 μ1^2 (49 + 13 Φ1 + 8 Φ2) + μ2 (312 + 141 Φ1 + 71 Φ2) +
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                μ1 (156 + 69 Φ1 + 29 Φ2 + μ2 (448 + 57 Φ1 + 91 Φ2)))))) -
    η^2 (4 × (9 + 9 μ1^2 + 41 μ2 + 16 μ2^2 + μ1 (18 + 41 μ2)) - θl
        (60 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
          μ2 (312 + 169 Φ1 + 103 Φ2) + 2 μ1^2 (19 Φ1 + 9 × (3 + Φ2)) +
          μ1 (114 + 89 Φ1 + 39 Φ2 + μ2 (312 + 113 Φ1 + 103 Φ2))) +
      ηt (-8 × (9 + 25 μ1^2 + μ1 (34 - 12 μ2) - 21 μ2 - 32 μ2^2) +
          θl (60 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
              μ2 (312 + 169 Φ1 + 103 Φ2) + 2 μ1^2 (19 Φ1 + 9 × (3 + Φ2)) +
              μ1 (114 + 89 Φ1 + 39 Φ2 + μ2 (312 + 113 Φ1 + 103 Φ2))))) -
    η^4 (12 × (24 + 42 μ1^2 + 67 μ2 - 4 μ2^2 + μ1 (66 + 79 μ2)) -
      θl (4 μ2^2 (134 + 45 Φ1 - 73 Φ2) + 15 × (22 + 7 Φ1 + Φ2) +
          μ1^2 (582 + 56 Φ1 + 66 Φ2) + μ2 (1476 + 343 Φ1 + 133 Φ2) +
          μ1 (912 + 161 Φ1 + 81 Φ2 + μ2 (2172 + 35 Φ1 + 313 Φ2))) +
      ηt (-42 + 354 μ1 + 396 μ1^2 - 255 μ2 + 705 μ1 μ2 + 72 μ2^2 +
          θl (4 μ2^2 (134 + 45 Φ1 - 73 Φ2) + 15 × (22 + 7 Φ1 + Φ2) +
              μ1^2 (582 + 56 Φ1 + 66 Φ2) + μ2 (1476 + 343 Φ1 + 133 Φ2) +
              μ1 (912 + 161 Φ1 + 81 Φ2 + μ2 (2172 + 35 Φ1 + 313 Φ2)))))) +
x^5 (-1 + η)^5 (-((-1 + η) θp (112 η^4 (3 + 3 μ1 + 4 μ2) - 14 η^3 (-117 - 213
              μ1 - 96 μ1^2 - 174 μ2 - 98 μ1 μ2 + 84 μ2^2 + 8 ηt (3 + 3 μ1 + 4 μ2)) +
          ηt (-234 + 272 μ1^2 - 113 μ2 + 516 μ2^2 + μ1 (38 + 927 μ2)) +
          2 × (219 + 450 μ1^2 + 833 μ2 + 704 μ2^2 + μ1 (669 + 1169 μ2)) +
          2 η (1275 + 3723 μ1 + 2448 μ1^2 + 3770 μ2 + 4622 μ1 μ2 + 700 μ2^2 +
              2 ηt (-279 - 166 μ1 + 113 μ1^2 - 276 μ2 + 612 μ1 μ2 + 588 μ2^2)) +
          6 η^2 (693 + 1050 μ1^2 + 1689 μ2 - 608 μ2^2 + 3 μ1 (581 + 491 μ2) +
              7 ηt (-39 - 58 μ2 + 28 μ2^2 + μ1 (-39 + 10 μ2))))) +
    (-1 + ηt) θl (2 × (90 + 80 μ1^2 - 7 μ2 - 84 μ2^2 + μ1 (170 + 9 μ2)) +
      θp (258 + 81 Φ1 + 4 μ2^2 (118 + 27 Φ1 - 91 Φ2) - 9 Φ2 +
          μ1^2 (512 + 21 Φ1 + 31 Φ2) + μ2 (1146 + 247 Φ1 + 37 Φ2) +
          μ1 (770 + 102 Φ1 + 22 Φ2 + μ2 (1834 - 113 Φ1 + 165 Φ2))) +
      η^2 (-40 × (25 μ1^2 + 6 μ2 + μ1 (25 + 96 μ2)) + 3 θp
            (1014 - 8 μ2^2 (-38 + 35 Φ2) + 2 μ2 (1635 + 14 Φ1 + 56 Φ2) +
              μ1^2 (962 + 33 Φ1 + 103 Φ2) +
              μ1 (1976 + 33 Φ1 + 103 Φ2 + μ2 (2470 + 4 Φ1 + 312 Φ2)))) +
      η (408 - 504 μ1^2 + 197 μ2 + 84 μ2^2 - 3 μ1 (32 + 889 μ2) +
          θp (2 × (954 + 51 Φ1 + 2 μ2^2 (314 + 9 Φ1 - 387 Φ2) + 3 μ2
                  (1127 + 53 Φ1 - Φ2) - 39 Φ2) + μ1^2 (2618 - 5 Φ1 + 175 Φ2) +
              μ1 (4526 + 97 Φ1 + 97 Φ2 + μ2 (7810 - 646 Φ1 + 614 Φ2))))) -
x^4 (-1 + η)^4 (-((-1 + η) θp (140 η^5 (3 + 3 μ1 + 4 μ2) + 70 η^4 (39 +
              63 μ1 + 24 μ1^2 + 58 μ2 + 22 μ1 μ2 - 28 μ2^2 - 2 ηt (3 + 3 μ1 + 4 μ2)) +
          10 η^3 (798 + 1848 μ1 + 1050 μ1^2 + 1809 μ2 + 1373 μ1 μ2 -
              912 μ2^2 + 7 ηt (-39 - 39 μ1 - 58 μ2 + 10 μ1 μ2 + 28 μ2^2)) +
          2 × (111 + 309 μ1 + 198 μ1^2 + 497 μ2 + 665 μ1 μ2 + 424 μ2^2 +
              ηt (-90 - 6 μ1 + 84 μ1^2 + 95 μ2 + 283 μ1 μ2 + 240 μ2^2)) +
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                10 η^2 (690 + 1914 μ1 + 1224 μ1^2 + 1943 μ2 + 2243 μ1 μ2 + 52 μ2^2 +
                    ηt (-279 - 149 μ1 + 130 μ1^2 - 276 μ2 + 672 μ1 μ2 + 588 μ2^2)) +
                η (6 × (377 + 1127 μ1 + 750 μ1^2 + 1419 μ2 + 1947 μ1 μ2 +
                        1056 μ2^2) + ηt (-1158 + 206 μ1 + 1364 μ1^2 -
                        517 μ2 + 5227 μ1 μ2 + 2616 μ2^2)))) + (-1 + ηt)
            θl (72 + 256 μ1 + 184 μ1^2 - 346 μ2 - 202 μ1 μ2 - 416 μ2^2 +
                θp (8 μ2^2 (64 + 27 Φ1 - 12 Φ2) + 3 × (50 + 39 Φ1 + 9 Φ2) +
                    μ1^2 (272 + 67 Φ1 + 37 Φ2) + 3 μ2 (274 + 125 Φ1 + 55 Φ2) +
                    μ1 (422 + 184 Φ1 + 64 Φ2 + μ2 (1222 + 119 Φ1 + 221 Φ2))) +
                η^2 (792 - 224 μ1 - 1016 μ1^2 + 298 μ2 - 6518 μ1 μ2 + 96 μ2^2 +
                    5 θp (990 + 57 Φ1 + 4 μ2^2 (158 + 9 Φ1 - 189 Φ2) - 33 Φ2 +
                        73 μ1 (32 + Φ1 + Φ2) + 3 μ2 (1180 + 61 Φ1 + 7 Φ2) +
                        2 μ1^2 (673 + 8 Φ1 + 53 Φ2) + μ1 μ2 (4060 - 253 Φ1 + 377 Φ2))) +
                10 η^3 (-4 × (39 μ1^2 + 8 μ2 + μ1 (39 + 148 μ2)) + θp
                    (519 + 2 μ2 (843 + 7 Φ1 + 28 Φ2) -
                        4 μ2^2 (-36 + 35 Φ2) + μ1^2 (494 + 23 Φ1 + 58 Φ2) +
                        μ1 (1013 + 23 Φ1 + 58 Φ2 + 2 μ2 (641 + 12 Φ1 + 89 Φ2)))) +
                η (8 × (90 + 116 μ1^2 + μ1 (206 - 22 μ2) - 7 μ2 - 84 μ2^2) +
                    θp (4 μ2^2 (606 + 153 Φ1 - 437 Φ2) + 3 × (454 + 143 Φ1 - 7 Φ2) +
                        10 μ1^2 (263 + 14 Φ1 + 19 Φ2) + μ2 (6060 + 1331 Φ1 + 281 Φ2) +
                        μ1 (3992 + 569 Φ1 + 169 Φ2 + μ2 (9508 - 417 Φ1 + 973 Φ2))))))) +
        x^3 (-1 + η)^3 (-2 × (-1 + η) θp (56 η^6 (3 + 3 μ1 + 4 μ2) + 2 ×
                (9 + 9 μ1^2 + 41 μ2 + 16 μ2^2 + μ1 (18 + 41 μ2)) +
                ηt (-4 + 20 μ1^2 + 303 μ2 + 304 μ2^2 + μ1 (16 + 283 μ2)) -
                7 η^5 (-96 μ1^2 + 8 ηt (3 + 3 μ1 + 4 μ2) -
                    3 μ1 (97 + 26 μ2) + 5 × (-39 - 58 μ2 + 28 μ2^2)) +
                5 η^4 (903 + 1050 μ1^2 + 1929 μ2 - 1216 μ2^2 + μ1 (1953 + 1273 μ2) +
                    7 ηt (-39 - 58 μ2 + 28 μ2^2 + μ1 (-39 + 10 μ2))) +
                10 η^3 (495 + 816 μ1^2 + 1334 μ2 - 164 μ2^2 + μ1 (1311 + 1450 μ2) +
                    2 ηt (-93 + 49 μ1^2 - 92 μ2 + 196 μ2^2 + 4 μ1 (-11 + 61 μ2))) +
                2 η (222 + 396 μ1^2 + 1007 μ2 + 824 μ2^2 + μ1 (618 + 1343 μ2) +
                    2 ηt (-90 + 48 μ1^2 + 95 μ2 + 240 μ2^2 + μ1 (-42 + 314 μ2))) +
                η^2 (2334 + 4500 μ1^2 + 8698 μ2 + 5632 μ2^2 + 2 μ1 (3417 + 5837 μ2) +
                    ηt (-1146 + 1368 μ1^2 - 469 μ2 + 2652 μ2^2 + μ1 (222 + 5819 μ2)))) +
            (-1 + ηt) θl (-2 × (12 + 139 μ2 + 116 μ2^2 + μ1 (12 + 139 μ2)) +
                θp (60 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
                    μ2 (312 + 169 Φ1 + 103 Φ2) + 2 μ1^2 (19 Φ1 + 9 × (3 + Φ2)) +
                    μ1 (114 + 89 Φ1 + 39 Φ2 + μ2 (312 + 113 Φ1 + 103 Φ2))) +
                η (2 × (128 + 396 μ1^2 + μ1 (524 - 207 μ2) - 439 μ2 - 564 μ2^2) +
                    3 θp (4 μ2^2 (75 Φ1 - 29 × (-6 + Φ2)) + 8 × (26 + 20 Φ1 + 5 Φ2) +
                        μ1^2 (370 + 93 Φ1 + 53 Φ2) + 2 μ2 (567 + 258 Φ1 + 118 Φ2) +
                        μ1 (578 + 253 Φ1 + 93 Φ2 + 2 μ2 (835 + 88 Φ1 + 156 Φ2))) +
                2 η^3 (384 - 512 μ1^2 + 101 μ2 + 12 μ2^2 - μ1 (128 + 3851 μ2) +
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        5 θp (684 + 42 Φ1 + 4 μ2^2 (106 + 9 Φ1 - 123 Φ2) - 18 Φ2 +
            6 μ2 (411 + 23 Φ1 + 5 Φ2) + μ1^2 (922 + 23 Φ1 + 83 Φ2) +
            μ1 (1606 + 65 Φ1 + 65 Φ2 + μ2 (2810 - 122 Φ1 + 298 Φ2))) +
      5 η^4 (-4 × (67 μ1^2 + 12 μ2 + μ1 (67 + 252 μ2)) + θp
          (1062 - 8 μ2^2 (-34 + 35 Φ2) + 2 μ2 (1737 + 14 Φ1 + 56 Φ2) +
            μ1^2 (1014 + 59 Φ1 + 129 Φ2) +
            μ1 (2076 + 59 Φ1 + 129 Φ2 + μ2 (2658 + 92 Φ1 + 400 Φ2))) +
      2 η^2 (6 × (90 + 152 μ1^2 + μ1 (242 - 53 μ2) - 7 μ2 - 84 μ2^2) +
        θp (4 μ2^2 (622 + 171 Φ1 - 419 Φ2) + 3 × (478 + 151 Φ1 + Φ2) +
            μ2 (6390 + 1427 Φ1 + 377 Φ2) + 25 μ1^2 (7 Φ1 + 9 × (12 + Φ2)) + μ1
             (4134 + 628 Φ1 + 228 Φ2 + μ2 (9846 - 269 Φ1 + 1121 Φ2))))) +
x^2 (-1 + η)^2 (-56 ηt θp - 108 ηt θp μ1 - 52 ηt θp μ1^2 - 11 θl μ2 + 11
    ηt θl μ2 - 406 ηt θp μ2 - 11 θl μ1 μ2 + 11 ηt θl μ1 μ2 - 414
    ηt θp μ1 μ2 - 8 θl μ2^2 + 8 ηt θl μ2^2 - 328 ηt θp μ2^2 + 56
    η^8 θp (3 + 3 μ1 + 4 μ2) - 14 η^7 θp (-105 - 48 μ1^2 - 158 μ2 +
      84 μ2^2 - 17 μ1 (9 + 2 μ2) + 4 ηt (3 + 3 μ1 + 4 μ2)) + 2 η^6 θp
    (2205 + 2814 μ1^2 + 4929 μ2 - 3972 μ2^2 + μ1 (5019 + 3281 μ2) +
      7 ηt (-105 - 158 μ2 + 84 μ2^2 + 15 μ1 (-7 + 2 μ2))) + 4 η
    θp (ηt (30 + 43 μ1^2 + μ1 (73 - 273 μ2) - 313 μ2 - 344 μ2^2) -
      3 × (9 + 9 μ1^2 + 41 μ2 + 16 μ2^2 + μ1 (18 + 41 μ2))) - η (-1 + ηt)
    θl (4 × (-4 + 13 μ1^2 + μ1 (9 - 105 μ2) - 107 μ2 - 92 μ2^2) +
      3 θp (60 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
        μ2 (312 + 169 Φ1 + 103 Φ2) + 2 μ1^2 (19 Φ1 + 9 × (3 + Φ2)) +
        μ1 (114 + 89 Φ1 + 39 Φ2 + μ2 (312 + 113 Φ1 + 103 Φ2))) + η^4
    (2 θp (-1569 - 1620 μ1^2 - 1413 μ2 + 7648 μ2^2 + 3 μ1 (-1063 + 377 μ2) +
        ηt (261 + 552 μ1^2 + 959 μ2 - 252 μ2^2 + 3 μ1 (271 + 817 μ2))) -
      (-1 + ηt) θl (372 - 144 μ1 - 516 μ1^2 + 53 μ2 - 4443 μ1 μ2 -
        24 μ2^2 + 5 θp (8 μ2^2 (80 + 9 Φ1 - 90 Φ2) + 3 × (354 + 23 Φ1 - 7 Φ2) +
            3 μ2 (1286 + 77 Φ1 + 23 Φ2) + 2 μ1 (1241 + 61 Φ1 + 61 Φ2) + μ1^2
             (1420 + 53 Φ1 + 143 Φ2) + μ1 μ2 (4370 - 113 Φ1 + 517 Φ2)))) +
  2 η^5 (2 × (-1 + ηt) θl (151 μ1^2 + 24 μ2 + μ1 (151 + 564 μ2)) +
      θp (951 + 3921 μ1 + 2970 μ1^2 + 4148 μ2 + 7016 μ1 μ2 + 1840 μ2^2 +
        2 ηt (-288 + 122 μ1 + 410 μ1^2 - 81 μ2 + 1875 μ1 μ2 + 1176 μ2^2) +
        3 θl (543 + 2 μ2 (894 + 7 Φ1 + 28 Φ2) -
            4 μ2^2 (-32 + 35 Φ2) + μ1^2 (520 + 36 Φ1 + 71 Φ2) +
            μ1 (1063 + 36 Φ1 + 71 Φ2 + 2 μ2 (688 + 34 Φ1 + 111 Φ2))) -
        3 ηt θl (543 + 2 μ2 (894 + 7 Φ1 + 28 Φ2) - 4 μ2^2
             (-32 + 35 Φ2) + μ1^2 (520 + 36 Φ1 + 71 Φ2) + μ1
             (1063 + 36 Φ1 + 71 Φ2 + 2 μ2 (688 + 34 Φ1 + 111 Φ2)))) - η^2
    (2 θp (6 × (102 + 189 μ1^2 + 469 μ2 + 384 μ2^2 + μ1 (291 + 637 μ2)) + ηt
             (-508 + 132 μ1^2 - 259 μ2 + 588 μ2^2 + μ1 (-376 + 1317 μ2))) + (-1 +
        ηt) θl (2 × (148 + 516 μ1^2 + μ1 (664 - 111 μ2) - 359 μ2 - 504 μ2^2) +
        3 θp (4 μ2^2 (266 + 117 Φ1 - 39 Φ2) + 6 × (54 + 41 Φ1 + 11 Φ2) +
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                6 μ2 (293 + 133 Φ1 + 63 Φ2) + μ1^2 (566 + 145 Φ1 + 85 Φ2) +
                μ1 (890 + 391 Φ1 + 151 Φ2 + μ2 (2566 + 290 Φ1 + 494 Φ2)))))) - 2
        η^3 (θp (1740 + 3312 μ1^2 + 5822 μ2 + 2528 μ2^2 + μ1 (5052 + 7598 μ2) +
            ηt (-594 + 1300 μ1^2 - 991 μ2 + 1248 μ2^2 + μ1 (706 + 4341 μ2))) +
          (-1 + ηt) θl (4 × (90 + 188 μ1^2 + μ1 (278 - 84 μ2) - 7 μ2 - 84 μ2^2) +
            θp (4 μ2^2 (638 + 189 Φ1 - 401 Φ2) +
                3 × (502 + 159 Φ1 + 9 Φ2) + 10 μ1^2 (277 + 21 Φ1 + 26 Φ2) +
                μ2 (6720 + 1523 Φ1 + 473 Φ2) + μ1 (4276 + 687 Φ1 +
                  287 Φ2 + μ2 (10 184 - 121 Φ1 + 1269 Φ2)))))) -
    x (-1 + η) × (16 η^9 θp (3 + 3 μ1 + 4 μ2) - ηt θp (4 + 4 μ1^2 + 27 μ2 +
          20 μ2^2 + μ1 (8 + 27 μ2)) + 2 η^8 θp (249 + 96 μ1^2 + 374 μ2 -
          196 μ2^2 - 8 ηt (3 + 3 μ1 + 4 μ2) + μ1 (345 + 58 μ2)) + 2 η^7
        θp (840 + 954 μ1^2 + 1763 μ2 - 1628 μ2^2 + μ1 (1794 + 1015 μ2) +
          ηt (-249 - 374 μ2 + 196 μ2^2 + μ1 (-249 + 70 μ2)) - η
        ((-1 + ηt) θl (4 + 4 μ1^2 + 5 μ2 + 4 μ2^2 + μ1 (8 + 5 μ2)) +
          ηt θp (76 + 48 μ1^2 + 657 μ2 + 540 μ2^2 + μ1 (124 + 665 μ2))) - η^2
        (2 θp (6 × (9 + 9 μ1^2 + 41 μ2 + 16 μ2^2 + μ1 (18 + 41 μ2)) +
            ηt (-92 - 206 μ1^2 + 407 μ2 + 512 μ2^2 + μ1 (-298 + 311 μ2))) +
          (-1 + ηt) θl (2 × (4 + 26 μ1^2 + μ1 (30 - 71 μ2) - 75 μ2 - 68 μ2^2) +
            3 θp (60 + 51 Φ1 + 21 Φ2 + 4 μ2^2 (50 + 27 Φ1 + 11 Φ2) +
                μ2 (312 + 169 Φ1 + 103 Φ2) + 2 μ1^2 (19 Φ1 + 9 × (3 + Φ2)) +
                μ1 (114 + 89 Φ1 + 39 Φ2 + μ2 (312 + 113 Φ1 + 103 Φ2))))) +
      η^6 (16 × (-1 + ηt) θl (7 μ1^2 + μ2 + μ1 (7 + 26 μ2)) + θp
            (1164 + 3960 μ1 + 2796 μ1^2 + 4130 μ2 + 6010 μ1 μ2 + 280 μ2^2 +
            2 ηt (-285 + 362 μ1^2 - 146 μ2 + 980 μ2^2 + μ1 (77 + 1634 μ2)) +
            θl (1110 - 40 μ2^2 (-6 + 7 Φ2) + 2 μ2 (1839 + 14 Φ1 + 56 Φ2) +
                μ1^2 (1066 + 85 Φ1 + 155 Φ2) +
                μ1 (2176 + 85 Φ1 + 155 Φ2 + 2 μ2 (1423 + 90 Φ1 + 244 Φ2))) -
            ηt θl (1110 - 40 μ2^2 (-6 + 7 Φ2) + 2 μ2 (1839 + 14 Φ1 + 56 Φ2) +
                μ1^2 (1066 + 85 Φ1 + 155 Φ2) + μ1 (2176 + 85 Φ1 +
                  155 Φ2 + 2 μ2 (1423 + 90 Φ1 + 244 Φ2))))) - η^3
        (2 θp (2 × (195 + 564 μ1 + 369 μ1^2 + 910 μ2 + 1246 μ1 μ2 + 728 μ2^2) +
            ηt (-308 + 84 μ1^2 - 369 μ2 + 168 μ2^2 + 7 μ1 (-32 + 121 μ2))) +
          (-1 + ηt) θl (2 × (56 + 212 μ1^2 + μ1 (268 - 5 μ2) - 93 μ2 - 148 μ2^2) +
            θp (4 μ2^2 (542 + 243 Φ1 - 69 Φ2) + 24 × (28 + 21 Φ1 + 6 Φ2) +
                6 μ2 (605 + 274 Φ1 + 134 Φ2) + μ1^2 (1154 + 301 Φ1 + 181 Φ2) +
                μ1 (1826 + 805 Φ1 + 325 Φ2 + 2 μ2 (2627 + 316 Φ1 + 520 Φ2))))) +
      η^5 (θp (-912 - 396 μ1^2 + 598 μ2 + 7592 μ2^2 + 2 μ1 (-654 + 1751 μ2) +
            ηt (-6 + 652 μ1^2 + 731 μ2 + 372 μ2^2 + μ1 (646 + 3595 μ2)) -
          (-1 + ηt) θl (72 - 104 μ1^2 + μ2 - 12 μ2^2 - μ1 (32 + 1007 μ2) +
            θp (4 μ2^2 (322 + 45 Φ1 - 351 Φ2) + 6 × (366 + 25 Φ1 - 5 Φ2) +
                6 μ2 (1339 + 85 Φ1 + 31 Φ2) + μ1^2 (2914 + 143 Φ1 + 323 Φ2) +
                μ1 (5110 + 293 Φ1 + 293 Φ2 + μ2 (9050 - 86 Φ1 + 1174 Φ2))))) -
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η^4 (θp (2 × (795 + 1458 μ1^2 + 2467 μ2 + 560 μ2^2 + μ1 (2253 + 3091 μ2)) +
        ηt (-402 + 1568 μ1^2 - 1133 μ2 + 804 μ2^2 + μ1 (1166 + 3995 μ2))) +
    (-1 + ηt) θl (2 × (90 + 224 μ1^2 + μ1 (314 - 115 μ2) - 7 μ2 - 84 μ2^2) +
        θp (1578 + 501 Φ1 + 4 μ2^2 (654 + 207 Φ1 - 383 Φ2) +
            51 Φ2 + 5 μ1^2 (568 + 49 Φ1 + 59 Φ2) +
            μ2 (7050 + 1619 Φ1 + 569 Φ2) + μ1 (4418 + 746 Φ1 +
                346 Φ2 + μ2 (10 522 + 27 Φ1 + 1417 Φ2))))))) -
w (x (-1 + η) - η) (-1 + η) × (2 x^7 (-1 + η)^7 θp (-20 + 11 ηt + 20 θl - 59
        μ1 + 11 ηt μ1 + 35 θl μ1 - 39 μ1^2 + 15 θl μ1^2 - 60 μ2 + 20 ηt
        μ2 + 60 θl μ2 - 60 μ1 μ2 + 28 θl μ1 μ2 + η^2 (11 + 11 μ1 + 20 μ2) + η
        (9 + 39 μ1^2 + 40 μ2 + 12 μ1 (4 + 5 μ2) - ηt (11 + 11 μ1 + 20 μ2)) + 4
        θl μ2 Φ2 - ηt θl (20 + 15 μ1^2 + 7 μ1 (5 + 4 μ2) + 4 μ2 (15 + Φ2))) +
    x^5 (-1 + η)^5 (2 × (-1 + η) θp (89 + 371 μ1 + 282 μ1^2 + 299 μ2 +
            635 μ1 μ2 + 368 μ2^2 + 21 η^3 (11 + 11 μ1 + 20 μ2) +
            ηt (-59 - 11 μ1 + 48 μ1^2 - 46 μ2 + 214 μ1 μ2 + 140 μ2^2) +
            3 η^2 (256 + 529 μ1 + 273 μ1^2 + 632 μ2 + 360 μ1 μ2 -
                168 μ2^2 - 7 ηt (11 + 11 μ1 + 20 μ2)) +
            η (395 + 1457 μ1 + 1062 μ1^2 + 984 μ2 + 1780 μ1 μ2 - 60 μ2^2 +
                2 ηt (-138 - 129 μ1 + 9 μ1^2 - 204 μ2 + 88 μ1 μ2 + 168 μ2^2))) -
        (-1 + ηt) θl (84 + 92 μ1 - 380 η μ1 - 180 η^2 μ1 + 8 μ1^2 - 380 η μ1^2 -
            180 η^2 μ1^2 + 65 μ2 - 160 η μ2 + 17 μ1 μ2 - 1488 η μ1 μ2 - 560 η^2 μ1 μ2 +
            24 μ2^2 + θp (94 + 378 μ2 + 272 μ2^2 + 15 Φ1 + 45 μ2 Φ1 - 15 Φ2 - 25 μ2 Φ2 -
                264 μ2^2 Φ2 - 2 μ1 (-219 + Φ1 + Φ2) + μ1^2 (344 - 17 Φ1 + 13 Φ2) +
                μ1 μ2 (1002 - 187 Φ1 + 23 Φ2) + 2 η (336 - 80 μ2^2 (-4 + 3 Φ2) +
                    6 μ2 (177 + 4 Φ1 + 12 Φ2) + μ1^2 (668 - 5 Φ1 + 55 Φ2) +
                    μ1 (1004 - 5 Φ1 - 2 μ2 (-839 + 62 Φ1 - 70 Φ2) + 55 Φ2)) +
                6 η^2 (164 + 3 μ1^2 (41 + 3 Φ1 + 3 Φ2) + μ2 (514 + 28 Φ2) +
                    μ1 (287 + 9 Φ1 + 9 Φ2 + μ2 (250 + 28 Φ1 + 28 Φ2))))) -
    x^6 (-1 + η)^6 (4 × (-1 + ηt) θl ((14 + 9 η) μ1^2 + 8 μ2 + μ1 (14 +
                56 μ2 + η (9 + 28 μ2))) + θp
            (14 η^3 (11 + 11 μ1 + 20 μ2) + 2 η^2 (121 + 273 μ1^2 + 386 μ2 -
                84 μ2^2 - 7 ηt (11 + 11 μ1 + 20 μ2) + μ1 (394 + 390 μ2)) +
            2 × (-52 - 229 μ1 - 177 μ1^2 - 144 μ2 - 312 μ1 μ2 - 40 μ2^2 +
                θl (52 + 4 μ2 (40 + Φ1 + 3 Φ2) - 8 μ2^2 (-7 + 5 Φ2) + μ1^2 (107 - 3 Φ1 +
                        7 Φ2) + μ1 (159 - 3 Φ1 - 4 μ2 (-66 + 7 Φ1 - 4 Φ2) + 7 Φ2)) +
                ηt (46 + 46 μ1 + 68 μ2 - 20 μ1 μ2 - 56 μ2^2 + θl (-52 + μ1^2 (-107 +
                            3 Φ1 - 7 Φ2) + μ1 (-159 + 3 Φ1 + 4 μ2 (-66 + 7 Φ1 - 4 Φ2) -
                            7 Φ2) - 4 μ2 (40 + Φ1 + 3 Φ2) + 8 μ2^2 (-7 + 5 Φ2)))) +
            η (2 ηt (31 + 72 μ2 + 56 μ2^2 + μ1 (31 + 20 μ2)) - 4 × (73 +
                    48 μ1^2 + 191 μ2 - 62 μ2^2 + μ1 (121 + 39 μ2)) +
                θl (304 + 934 μ2 + 56 μ2 Φ2 + 3 μ1^2 (76 + 3 Φ1 + 3 Φ2) +
                    μ1 (532 + 9 Φ1 + 9 Φ2 + μ2 (446 + 28 Φ1 + 28 Φ2))) -
                ηt θl (304 + 934 μ2 + 56 μ2 Φ2 + 3 μ1^2 (76 + 3 Φ1 + 3 Φ2) +
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                μ1 (532 + 9 Φ1 + 9 Φ2 + μ2 (446 + 28 Φ1 + 28 Φ2)))))) +
x^2 (-1 + η)^2 (-((-1 + η) θp (42 η^6 (11 + 11 μ1 + 20 μ2) + ηt
          (-10 + 10 μ1^2 + 207 μ2 + 207 μ1 μ2 + 204 μ2^2) -
        2 η ηt (148 + 98 μ1^2 - 89 μ2 - 204 μ2^2 + μ1 (246 + 55 μ2)) +
        4 η (54 + 54 μ1^2 + 227 μ2 + 136 μ2^2 + μ1 (108 + 227 μ2)) +
        6 η^5 (430 + 273 μ1^2 + 950 μ2 - 420 μ2^2 -
          7 ηt (11 + 11 μ1 + 20 μ2) + μ1 (703 + 270 μ2)) +
        4 η^3 (553 + 1410 μ1^2 + 1693 μ2 + 928 μ2^2 + μ1 (1963 + 3085 μ2) +
          ηt (-295 + 95 μ1 + 390 μ1^2 - 230 μ2 + 1622 μ1 μ2 + 700 μ2^2)) +
        10 η^4 (322 + 531 μ1^2 + 672 μ2 - 480 μ2^2 + μ1 (853 + 752 μ2) +
          2 ηt (-69 + 18 μ1^2 - 102 μ2 + 84 μ2^2 + μ1 (-51 + 86 μ2))) +
        6 η^2 (186 + 360 μ1^2 + 808 μ2 + 832 μ2^2 + 26 μ1 (21 + 44 μ2) +
          ηt (-114 + 112 μ1^2 - 13 μ2 + 198 μ2^2 + μ1 (-2 + 499 μ2))))) +
    (-1 + ηt) θl (-2 × (7 + 7 μ1^2 + 48 μ2 + 36 μ2^2 + 2 μ1 (7 + 24 μ2)) +
      θp (14 + 17 Φ1 + 7 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
        μ1^2 (17 Φ1 + 7 × (2 + Φ2)) + μ2 (55 Φ1 + 37 × (2 + Φ2)) +
        μ1 (34 Φ1 + 55 μ2 Φ1 + 14 × (2 + Φ2) + 37 μ2 (2 + Φ2))) +
      η^5 (-20 μ1 (9 + 9 μ1 + 28 μ2) + 3 θp (400 + 1310 μ2 + 56 μ2 Φ2 +
          15 μ1^2 (20 + 3 Φ1 + 3 Φ2) + 5 μ1 (140 + 9 Φ1 + 9 Φ2) +
          2 μ1 μ2 (331 + 70 Φ1 + 70 Φ2))) +
      2 η^3 (2 × (75 + 56 μ1^2 + μ1 (131 - 247 μ2) + 29 μ2 - 3 μ2^2) +
        θp (614 + 111 Φ1 + 4 μ2^2 (334 + 27 Φ1 - 303 Φ2) - 39 Φ2 +
          μ2 (2586 + 369 Φ1 + 19 Φ2) + 2 μ1 (1263 + 61 Φ1 + 61 Φ2) +
          μ1^2 (1912 + 11 Φ1 + 161 Φ2) + μ1 μ2 (5898 - 551 Φ1 + 499 Φ2))) +
      2 η^4 (-4 × (85 μ1^2 + 20 μ2 + μ1 (85 + 324 μ2)) + 5 θp (μ1^2 (373 + 17 Φ1 +
            47 Φ2) + 4 × (51 + μ2^2 (34 - 30 Φ2) + 3 μ2 (57 + Φ1 + 3 Φ2)) +
          μ1 (577 + 17 Φ1 + 47 Φ2 + 4 μ2 (245 + Φ1 + 34 Φ2)))) +
      2 η^2 (188 + 636 μ1 + 448 μ1^2 + 83 μ2 + 443 μ1 μ2 - 84 μ2^2 +
        3 θp (74 + 59 Φ1 + 8 μ2^2 (38 + 9 Φ1 - 28 Φ2) +
          μ2 (464 + 169 Φ1 - 5 Φ2) - 11 Φ2 + 2 μ1^2 (101 + 6 Φ1 + Φ2) +
          μ1 (276 + 71 Φ1 - 9 Φ2 + μ2 (840 - 99 Φ1 + 39 Φ2)))) +
      η (2 × (40 + 90 μ1^2 + μ1 (130 - 59 μ2) - 87 μ2 - 114 μ2^2) +
        θp (4 μ2^2 (134 + 63 Φ1 - 27 Φ2) + 2 μ1^2 (58 + 47 Φ1 + 2 Φ2) +
          3 × (42 + 53 Φ1 + 3 Φ2) + μ2 (844 + 465 Φ1 + 123 Φ2) +
          μ1 (242 + 253 Φ1 + 13 Φ2 + μ2 (868 + 141 Φ1 + 135 Φ2))))))) +
η θp (-2 η^8 (11 + 11 μ1 + 20 μ2) + 2 η^7 (-67 - 39 μ1^2 - 146 μ2 +
      84 μ2^2 - 2 μ1 (53 + 15 μ2) + ηt (11 + 11 μ1 + 20 μ2)) + 2
    ηt (7 + 7 μ1^2 + 48 μ2 + 36 μ2^2 + 2 μ1 (7 + 24 μ2)) + η
    (-θl (14 + 17 Φ1 + 7 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
        μ1^2 (17 Φ1 + 7 × (2 + Φ2)) + μ2 (55 Φ1 + 37 × (2 + Φ2)) +
        μ1 (34 Φ1 + 55 μ2 Φ1 + 14 × (2 + Φ2) + 37 μ2 (2 + Φ2))) +
      ηt (-28 - 96 μ1 - 68 μ1^2 + 95 μ2 + 71 μ1 μ2 + 120 μ2^2 +
        θl (14 + 17 Φ1 + 7 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
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$$\mu 1^2 (17 \Phi 1 + 7 \times (2 + \Phi 2)) + \mu 2 (55 \Phi 1 + 37 \times (2 + \Phi 2)) +$$
$$\mu 1 (34 \Phi 1 + 55 \mu 2 \Phi 1 + 14 \times (2 + \Phi 2) + 37 \mu 2 (2 + \Phi 2)))))) +$$
$$\eta^6 \left(-2 \times \left(57 + 138 \mu 1^2 + 98 \mu 2 - 176 \mu 2^2 + 5 \mu 1 (39 + 38 \mu 2)\right) -\right.$$
$$\theta l \left(64 + 214 \mu 2 + 8 \mu 2 \Phi 2 + \mu 1^2 (48 + 9 \Phi 1 + 9 \Phi 2) +\right.$$
$$\mu 1 (112 + 9 \Phi 1 + 9 \Phi 2 + 2 \mu 2 (55 + 14 \Phi 1 + 14 \Phi 2))) +$$
$$\eta t \left(70 + 34 \mu 1 - 36 \mu 1^2 + 96 \mu 2 - 152 \mu 1 \mu 2 - 112 \mu 2^2 +\right.$$
$$\theta l \left(64 + 214 \mu 2 + 8 \mu 2 \Phi 2 + \mu 1^2 (48 + 9 \Phi 1 + 9 \Phi 2) +\right.$$
$$\mu 1 (112 + 9 \Phi 1 + 9 \Phi 2 + 2 \mu 2 (55 + 14 \Phi 1 + 14 \Phi 2)))))) + 2$$
$$\eta^5 \left(10 - 95 \mu 1 - 105 \mu 1^2 - 101 \mu 2 - 385 \mu 1 \mu 2 - 324 \mu 2^2 -\right.$$
$$\theta l \left(76 - 40 \mu 2^2 (-1 + \Phi 2) + 2 \mu 2 (131 + 2 \Phi 1 + 6 \Phi 2) +\right.$$
$$\mu 1^2 (133 + 10 \Phi 1 + 20 \Phi 2) + \mu 1 (209 + 10 \Phi 1 + 20 \Phi 2 +$$
$$2 \mu 2 (179 + 8 \Phi 1 + 30 \Phi 2))) + \eta t \left(13 - 67 \mu 1 - 80 \mu 1^2 -\right.$$
$$22 \mu 2 - 322 \mu 1 \mu 2 - 84 \mu 2^2 + \theta l \left(76 - 40 \mu 2^2 (-1 + \Phi 2) +\right.$$
$$2 \mu 2 (131 + 2 \Phi 1 + 6 \Phi 2) + \mu 1^2 (133 + 10 \Phi 1 + 20 \Phi 2) +$$
$$\mu 1 (209 + 10 \Phi 1 + 20 \Phi 2 + 2 \mu 2 (179 + 8 \Phi 1 + 30 \Phi 2)))))) +$$
$$\eta^2 \left(4 \times \left(18 + 18 \mu 1^2 + 79 \mu 2 + 40 \mu 2^2 + \mu 1 (36 + 79 \mu 2)\right) -\right.$$
$$\theta l \left(58 + 61 \Phi 1 + 12 \mu 2^2 (18 + 9 \Phi 1 - \Phi 2) + 11 \Phi 2 +\right.$$
$$6 \mu 1^2 (8 + 6 \Phi 1 + \Phi 2) + \mu 2 (352 + 187 \Phi 1 + 73 \Phi 2) +$$
$$\mu 1 (106 + 97 \Phi 1 + 17 \Phi 2 + \mu 2 (344 + 71 \Phi 1 + 69 \Phi 2))) +$$
$$\eta t \left(-74 - 208 \mu 1 - 134 \mu 1^2 - 89 \mu 2 - 177 \mu 1 \mu 2 - 24 \mu 2^2 +\right.$$
$$\theta l \left(58 + 61 \Phi 1 + 12 \mu 2^2 (18 + 9 \Phi 1 - \Phi 2) + 11 \Phi 2 +\right.$$
$$6 \mu 1^2 (8 + 6 \Phi 1 + \Phi 2) + \mu 2 (352 + 187 \Phi 1 + 73 \Phi 2) +$$
$$\mu 1 (106 + 97 \Phi 1 + 17 \Phi 2 + \mu 2 (344 + 71 \Phi 1 + 69 \Phi 2)))))) +$$
$$\eta^3 \left(114 + 402 \mu 1 + 288 \mu 1^2 + 534 \mu 2 + 870 \mu 1 \mu 2 + 592 \mu 2^2 -\right.$$
$$\theta l \left(98 + 71 \Phi 1 + 4 \mu 2^2 (86 + 27 \Phi 1 - 47 \Phi 2) + \Phi 2 +\right.$$
$$\mu 1^2 (224 + 23 \Phi 1 + 13 \Phi 2) + \mu 2 (578 + 217 \Phi 1 + 43 \Phi 2) +$$
$$\mu 1 (322 + 94 \Phi 1 + 14 \Phi 2 + \mu 2 (962 - 47 \Phi 1 + 91 \Phi 2))) +$$
$$\eta t \left(-20 + 248 \mu 1 + 268 \mu 1^2 - 91 \mu 2 + 685 \mu 1 \mu 2 + 48 \mu 2^2 +\right.$$
$$\theta l \left(98 + 71 \Phi 1 + 4 \mu 2^2 (86 + 27 \Phi 1 - 47 \Phi 2) + \Phi 2 +\right.$$
$$\mu 1^2 (224 + 23 \Phi 1 + 13 \Phi 2) + \mu 2 (578 + 217 \Phi 1 + 43 \Phi 2) +$$
$$\mu 1 (322 + 94 \Phi 1 + 14 \Phi 2 + \mu 2 (962 - 47 \Phi 1 + 91 \Phi 2)))))) +$$
$$\eta^4 \left(4 \times \left(16 + 67 \mu 1 + 51 \mu 1^2 - 30 \mu 2 + 6 \mu 1 \mu 2 - 156 \mu 2^2\right) -\right.$$
$$\theta l \left(142 + 27 \Phi 1 + 12 \mu 2^2 (22 + 3 \Phi 1 - 19 \Phi 2) - 3 \Phi 2 +\right.$$
$$3 \mu 1^2 (136 + 5 \Phi 1 + 15 \Phi 2) + \mu 2 (610 + 93 \Phi 1 + 23 \Phi 2) +$$
$$\mu 1 (550 + 42 \Phi 1 + 42 \Phi 2 + \mu 2 (1298 - 59 \Phi 1 + 151 \Phi 2))) +$$
$$\eta t \left(-10 + 106 \mu 1 + 116 \mu 1^2 - 103 \mu 2 + 121 \mu 1 \mu 2 + 64 \mu 2^2 +\right.$$
$$\theta l \left(142 + 27 \Phi 1 + 12 \mu 2^2 (22 + 3 \Phi 1 - 19 \Phi 2) - 3 \Phi 2 +\right.$$
$$3 \mu 1^2 (136 + 5 \Phi 1 + 15 \Phi 2) + \mu 2 (610 + 93 \Phi 1 + 23 \Phi 2) +$$
$$\mu 1 (550 + 42 \Phi 1 + 42 \Phi 2 + \mu 2 (1298 - 59 \Phi 1 + 151 \Phi 2)))))))) +$$
$$x^4 (-1 + \eta)^4 \left(-\left((-1 + \eta) \theta p \left(70 \eta^4 (11 + 11 \mu 1 + 20 \mu 2) + \eta t\right.\right.\right.$$
$$\left(-120 + 24 \mu 1 + 144 \mu 1^2 - 37 \mu 2 + 323 \mu 1 \mu 2 + 180 \mu 2^2\right) +$$
$$2 \times \left(93 + 273 \mu 1 + 180 \mu 1^2 + 383 \mu 2 + 551 \mu 1 \mu 2 + 456 \mu 2^2\right) +$$
$$10 \eta^3 \left(314 + 587 \mu 1 + 273 \mu 1^2 + 738 \mu 2 + 330 \mu 1 \mu 2 -\right.$$

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                252 μ2^2 - 7 ηt (11 + 11 μ1 + 20 μ2)) +
            10 η^2 (239 + 770 μ1 + 531 μ1^2 + 552 μ2 + 844 μ1 μ2 - 180 μ2^2 +
                2 ηt (-69 - 60 μ1 + 9 μ1^2 - 102 μ2 + 58 μ1 μ2 + 84 μ2^2)) +
            2 η (481 + 1891 μ1 + 1410 μ1^2 + 1561 μ2 + 3145 μ1 μ2 + 1536 μ2^2 +
                ηt (-295 - 5 μ1 + 290 μ1^2 - 230 μ2 + 1254 μ1 μ2 + 700 μ2^2)))) +
        (-1 + ηt) θl (2 × (68 + 88 μ1^2 + 49 μ2 - 12 μ2^2 + μ1 (156 + 161 μ2)) +
            θp (50 + 47 Φ1 + 4 μ2^2 (66 + 9 Φ1 - 65 Φ2) + μ2 (350 + 121 Φ1 - 53 Φ2) +
                μ1 (230 + 48 Φ1 + μ2 (718 - 151 Φ1 - 13 Φ2) - 32 Φ2) +
                μ1^2 (180 + Φ1 - 9 Φ2) - 23 Φ2) + 5 η^3 (-8 μ1 (9 + 9 μ1 + 28 μ2) +
                θp (352 + 1122 μ2 + 56 μ2 Φ2 + 3 μ1^2 (88 + 9 Φ1 + 9 Φ2) +
                    μ1 (616 + 27 Φ1 + 27 Φ2 + μ2 (554 + 84 Φ1 + 84 Φ2)))) + 2 η^2
            (-32 × (15 μ1^2 + 5 μ2 + μ1 (15 + 58 μ2)) + 5 θp (μ1^2 (347 + 4 Φ1 + 34
                    Φ2) + 2 × (90 + μ2^2 (76 - 60 Φ2) + 3 μ2 (97 + 2 Φ1 + 6 Φ2)) +
                    μ1 (527 + 4 Φ1 + 34 Φ2 + μ2 (886 - 40 Φ1 + 92 Φ2)))) +
            η (4 × (81 + 24 μ1^2 + μ1 (105 - 71 μ2) + 53 μ2 + 15 μ2^2) +
                θp (518 + 87 Φ1 + 4 μ2^2 (338 + 9 Φ1 - 321 Φ2) +
                    μ2 (2122 + 273 Φ1 - 77 Φ2) - 63 Φ2 + μ1^2 (1784 - 53 Φ1 + 97 Φ2) +
                    μ1 (2302 + 34 Φ1 + 34 Φ2 + μ2 (5306 - 807 Φ1 + 243 Φ2))))))) -
x^3 (-1 + η)^3 (-2 × (-1 + η) θp (35 η^5 (11 + 11 μ1 + 20 μ2) - ηt
            (52 + 54 μ1 + 2 μ1^2 - 19 μ2 + 25 μ1 μ2 - 60 μ2^2) +
        4 × (9 + 18 μ1 + 9 μ1^2 + 37 μ2 + 37 μ1 μ2 + 24 μ2^2) +
        5 η^4 (372 + 645 μ1 + 273 μ1^2 + 844 μ2 + 300 μ1 μ2 -
            336 μ2^2 - 7 ηt (11 + 11 μ1 + 20 μ2)) +
        10 η^3 (187 + 541 μ1 + 354 μ1^2 + 408 μ2 + 532 μ1 μ2 - 220 μ2^2 +
            2 ηt (-46 - 37 μ1 + 9 μ1^2 - 68 μ2 + 48 μ1 μ2 + 56 μ2^2)) +
        2 η (186 + 546 μ1 + 360 μ1^2 + 787 μ2 + 1123 μ1 μ2 + 872 μ2^2 +
            ηt (-117 + 11 μ1 + 128 μ1^2 - 25 μ2 + 411 μ1 μ2 + 189 μ2^2)) +
        2 η^2 (517 + 1927 μ1 + 1410 μ1^2 + 1627 μ2 + 3115 μ1 μ2 + 1232 μ2^2 +
            ηt (-295 + 45 μ1 + 340 μ1^2 - 230 μ2 + 1438 μ1 μ2 + 700 μ2^2))) +
    (-1 + ηt) θl (38 + 96 μ1 + 58 μ1^2 - 95 μ2 - 79 μ1 μ2 - 120 μ2^2 +
        θp (34 + 49 Φ1 + 8 μ2^2 (20 + 9 Φ1 - 6 Φ2) + μ1^2 (34 + 29 Φ1 - Φ2) -
            Φ2 + μ2 (246 + 139 Φ1 + 25 Φ2) + μ1 (68 + 78 Φ1 - 2 Φ2 +
                μ2 (262 + 35 Φ1 + 33 Φ2))) + 10 η^4 (-4 μ1 (9 + 9 μ1 + 28 μ2) +
            θp (3 μ1^2 (47 + 6 Φ1 + 6 Φ2) + 4 × (47 + μ2 (152 + 7 Φ2)) +
                μ1 (329 + 18 Φ1 + 18 Φ2 + 8 μ2 (38 + 7 Φ1 + 7 Φ2)))) +
        2 η (196 + 356 μ1^2 + 115 μ2 - 60 μ2^2 + μ1 (552 + 463 μ2) +
            θp (2 × (62 + 53 Φ1 + μ2^2 (284 + 54 Φ1 - 242 Φ2) + μ2
                    (407 + 145 Φ1 - 29 Φ2) - 17 Φ2) + μ1^2 (382 + 13 Φ1 - 7 Φ2) +
                μ1 (506 + 119 Φ1 - 41 Φ2 + μ2 (1558 - 250 Φ1 + 26 Φ2)))) +
        4 η^3 (-2 × (145 μ1^2 + 40 μ2 + μ1 (145 + 556 μ2)) + 5 θp (128 +
                μ2^2 (96 - 80 Φ2) + μ2 (422 + 8 Φ1 + 24 Φ2) + μ1^2 (240 + 7 Φ1 + 27
                    Φ2) + μ1 (368 + 7 Φ1 + 27 Φ2 + μ2 (622 - 12 Φ1 + 76 Φ2)))) +
        η^2 (6 × (78 + 40 μ1^2 + μ1 (118 - 159 μ2) + 41 μ2 + 6 μ2^2) +
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            2 θp (566 + 99 Φ1 + 24 μ2^2 (56 + 3 Φ1 - 52 Φ2) -
                3 μ1^2 (-616 + 7 Φ1 - 43 Φ2) + μ2 (2354 + 321 Φ1 - 29 Φ2) - 51 Φ2 +
                μ1 (2414 + 78 Φ1 + 78 Φ2 + μ2 (5602 - 679 Φ1 + 371 Φ2)))))) +
x (-1 + η) × (14 η^8 θp (11 + 11 μ1 + 20 μ2) + 2 η^7 θp (411 + 273 μ1^2 +
      916 μ2 - 504 μ2^2 + 12 μ1 (57 + 20 μ2) - 7 ηt (11 + 11 μ1 + 20 μ2)) - 2
    ηt θp (11 + 11 μ1^2 + 64 μ2 + 48 μ2^2 + μ1 (22 + 64 μ2)) - η^2
    (4 θp (54 + 54 μ1^2 + 232 μ2 + 128 μ2^2 + 4 μ1 (27 + 58 μ2) -
            ηt (64 + 84 μ1^2 + 39 μ2 - 15 μ2^2 + 37 μ1 (4 + 3 μ2))) +
        (-1 + ηt) θl (42 + 164 μ1 + 122 μ1^2 - 79 μ2 - 39 μ1 μ2 - 108 μ2^2 +
            θp (8 μ2^2 (74 + 36 Φ1 - 9 Φ2) + 8 μ1 (35 + 34 Φ1 + 4 Φ2) +
                3 × (50 + 57 Φ1 + 7 Φ2) + 19 μ2 (50 + 27 Φ1 + 9 Φ2) +
                μ1^2 (130 + 101 Φ1 + 11 Φ2) + μ1 μ2 (950 + 177 Φ1 + 171 Φ2)))) -
    η^4 (2 θp (217 + 690 μ1^2 + 101 μ2 - 960 μ2^2 + μ1 (907 + 725 μ2) +
            ηt (-73 + 248 μ1^2 - 228 μ2 + 286 μ2^2 + μ1 (175 + 632 μ2))) +
        (-1 + ηt) θl (72 + 144 μ1 + 72 μ1^2 + 17 μ2 - 335 μ1 μ2 - 12 μ2^2 +
            θp (662 + 123 Φ1 + 8 μ2^2 (166 + 18 Φ1 - 147 Φ2) - 27 Φ2 +
                μ2 (2818 + 417 Φ1 + 67 Φ2) + 2 μ1 (1319 + 83 Φ1 + 83 Φ2) + μ1^2
                 (1976 + 43 Φ1 + 193 Φ2) + μ1 μ2 (6194 - 423 Φ1 + 627 Φ2)))) -
    2 η (ηt θp (-23 - 33 μ1^2 + 135 μ2 + 150 μ2^2 + μ1 (-56 + 123 μ2)) +
        (-1 + ηt) θl (-3 - 6 μ1 - 3 μ1^2 - 32 μ2 - 32 μ1 μ2 - 24 μ2^2 +
            θp (14 + 17 Φ1 + 7 Φ2 + 4 μ2^2 (9 Φ1 + 7 × (2 + Φ2)) +
                μ1^2 (17 Φ1 + 7 × (2 + Φ2)) + μ2 (55 Φ1 + 37 × (2 + Φ2)) +
                μ1 (34 Φ1 + 55 μ2 Φ1 + 14 × (2 + Φ2) + 37 μ2 (2 + Φ2))))) - 2 η^3
    (θp (ηt (-82 + 382 μ1^2 - 123 μ2 + 186 μ2^2 + 3 μ1 (100 + 403 μ2)) +
            2 × (132 + 306 μ1^2 + 597 μ2 + 664 μ2^2 + μ1 (438 + 933 μ2))) +
        (-1 + ηt) θl (60 + 180 μ1^2 + 17 μ2 - 36 μ2^2 + 3 μ1 (80 + 47 μ2) +
            θp (μ1 (598 + 165 Φ1 - 2 μ2 (-901 + 73 Φ1 - 65 Φ2) + 5 Φ2) +
                μ1^2 (426 + 35 Φ1 + 15 Φ2) + 2 × (86 + 65 Φ1 + μ2^2 (324 + 90 Φ1 -
                        206 Φ2) - 5 Φ2 + μ2 (521 + 193 Φ1 + 19 Φ2))))) - 2 η^6
    (-2 × (-1 + ηt) θl μ1 (9 + 9 μ1 + 28 μ2) + θp (-239 - 1028 μ1 -
            789 μ1^2 - 408 μ2 - 1172 μ1 μ2 + 756 μ2^2 -
            θl (212 + 702 μ2 + 28 μ2 Φ2 + 3 μ1^2 (53 + 9 Φ1 + 9 Φ2) +
                μ1 (371 + 27 Φ1 + 27 Φ2 + μ2 (358 + 84 Φ1 + 84 Φ2))) +
            ηt (199 + 109 μ1 - 90 μ1^2 + 268 μ2 - 400 μ1 μ2 - 336 μ2^2 +
                θl (212 + 702 μ2 + 28 μ2 Φ2 + 3 μ1^2 (53 + 9 Φ1 + 9 Φ2) +
                    μ1 (371 + 27 Φ1 + 27 Φ2 + μ2 (358 + 84 Φ1 + 84 Φ2)))))) -
    2 η^5 (-2 × (-1 + ηt) θl (39 μ1^2 + 8 μ2 + μ1 (39 + 148 μ2)) +
        θp (138 - 210 μ1 - 348 μ1^2 - 295 μ2 - 1643 μ1 μ2 -
            1884 μ2^2 - θl (432 + μ2^2 (256 - 240 Φ2) +
                6 μ2 (245 + 4 Φ1 + 12 Φ2) + μ1^2 (772 + 47 Φ1 + 107 Φ2) +
                μ1 (1204 + 47 Φ1 + 107 Φ2 + μ2 (2054 + 52 Φ1 + 316 Φ2))) +
            ηt (19 - 331 μ1 - 350 μ1^2 - 178 μ2 - 1406 μ1 μ2 - 364 μ2^2 +
                θl (432 + μ2^2 (256 - 240 Φ2) + 6 μ2 (245 + 4 Φ1 + 12 Φ2) +
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                                μ1^2 (772 + 47 Φ1 + 107 Φ2) + μ1 (1204 + 47 Φ1 +
                                    107 Φ2 + μ2 (2054 + 52 Φ1 + 316 Φ2)))))))))) /
    (96 (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
      (w +
          x +
          η -
          w
           η - x
           η)^3 (-1 + ηt) θl θp Φ1))

δgs2 =
 - (((-1 + η) × (-2 f (-1 + w (-1 + η)) (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η) (1 + x + η -
              x η)^2 θl (-x^2 (-1 + η)^2 θp (-12 + 4 ηt + 12 θl - 12 ηt θl + η^2 (8 - 20 Φ2) -
                6 Φ2 - 10 ηt Φ2 + 16 θl Φ2 - 16 ηt θl Φ2 - 7 θl Φ2^2 + 7 ηt θl Φ2^2 +
                2 η (2 + θl (2 - 5 Φ2) + 13 Φ2 + ηt (1 + θl) × (-2 + 5 Φ2)) +
                w (-1 + η) × (2 η^2 (-2 + 5 Φ2) + (-10 + 7 Φ2) × (-2 + θl (2 + Φ2)) - 2 η
                    (8 - 2 Φ2 + ηt (-2 + 5 Φ2)) + ηt (-4 + 10 Φ2 + θl (20 - 4 Φ2 - 7 Φ2^2)))) +
            θp (4 η^4 (-2 + 5 Φ2) + 2 ηt (-10 + 7 Φ2) + 2 w^2 (-1 + η)^3 (η - ηt)
                (-10 + 7 Φ2 + η (-2 + 5 Φ2)) -
                2 η^3 (2 + θl (2 - 5 Φ2) + 13 Φ2 + ηt (1 + θl) × (-2 + 5 Φ2)) +
                η (-10 + 7 Φ2) (-θl (2 + Φ2) + ηt (-2 + θl (2 + Φ2))) + η^2 (6 × (2 + Φ2) +
                    θl (-12 - 16 Φ2 + 7 Φ2^2) + ηt (-4 + 10 Φ2 + θl (12 + 16 Φ2 - 7 Φ2^2))) -
                w (-1 + η) (η^3 (ηt (4 - 10 Φ2) + 24 × (-1 + Φ2)) + 2 η^4 (-2 + 5 Φ2) +
                    4 ηt (-10 + 7 Φ2) + η^2 (16 - 40 Φ2 - (-1 + ηt) θl (-24 + 14 Φ2 + 7 Φ2^2)) +
                    η (-18 ηt (-2 + Φ2) + 6 × (2 + Φ2) + θl (28 - 24 Φ2 - 7 Φ2^2) +
                        ηt θl (-28 + 24 Φ2 + 7 Φ2^2)))) +
            x (-1 + η) × (-2 (w (-1 + η) - 2 η) (-1 + η) θp (6 - 2 ηt + η (4 - 10 Φ2) +
                    3 Φ2 + 5 ηt Φ2 + w (-1 + η) × (-10 + 2 ηt + 7 Φ2 - 5 ηt Φ2 + η (-2 + 5 Φ2))) +
                (-1 + ηt) θl (-20 + 14 Φ2 + 2 w^2 (-1 + η)^2 (-10 + 7 Φ2) + θp (20 - 4 Φ2 -
                        7 Φ2^2 + 4 η^2 (-2 + 5 Φ2) + 2 η (-12 - 16 Φ2 + 7 Φ2^2)) - w (-1 + η) ×
                    (-40 + 28 Φ2 + θp (28 - 24 Φ2 - 7 Φ2^2 + 2 η (-22 + 9 Φ2 + 7 Φ2^2))))))) +
        cv cσ (x (-1 + η) - η) (1 + x + η - x η)^2 ((x + η - x η)^2 (-1 + ηt) θl θp
            (1 + μ1) × (14 x (-1 + η) - 14 η - 5 × (2 + Φ1 + Φ2)) +
            w^4 (-1 + η)^4 (θp (-4 η^3 (1 + μ1) - 20 ηt (1 + μ1) +
                    4 η^2 (6 + ηt - 6 μ1 + ηt μ1) + η (16 ηt (1 + μ1) + 4 × (-5 + 7 μ1) +
                        θl (64 + 15 Φ1 + μ1 (16 + 15 Φ1 - 29 Φ2) + 19 Φ2) -
                        ηt θl (64 + 15 Φ1 + μ1 (16 + 15 Φ1 - 29 Φ2) + 19 Φ2))) + x (-1 + η) ×
                (4 × (-1 + η) θp (-5 + 7 μ1 + η (1 + μ1) - ηt (1 + μ1)) + (-1 + ηt) θl
                    (-20 × (1 + μ1) + θp (64 + 15 Φ1 + μ1 (16 + 15 Φ1 - 29 Φ2) + 19 Φ2)))) +
            w (-1 + η) × (-4 x^3 (-1 + η)^3 θp (7 - 14 θl - 5 μ1 - 2 θl μ1 + 3 η^2 (1 + μ1) -
                    η ηt (1 + 2 θl) × (1 + μ1) + 2 η (-5 + θl + μ1 + θl μ1) +
                    ηt (1 + μ1 + 2 θl (7 + μ1))) + x^2 (-1 + η)^2 θp (36 η^3 (1 + μ1) -
                    12 η^2 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-5 + θl + μ1 + θl μ1)) +
                    12 η (7 - 5 μ1 - 2 θl (7 + μ1) + ηt (1 + μ1 + 2 θl (7 + μ1))) +
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(-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2)) + θp (12 η^5 (1 + μ1) + 20 ηt
  (1 + μ1) - 4 η^4 (ηt (1 + 2 θl) × (1 + μ1) - 2 × (-5 + θl + μ1 + θl μ1)) +
  4 η^3 (7 - 5 μ1 - 2 θl (7 + μ1) + ηt (1 + μ1 + 2 θl (7 + μ1))) +
  η^2 (-1 + ηt) θl (1 + μ1) × (58 + 15 Φ1 + 15 Φ2) +
  η (-θl (30 + 15 Φ1 + μ1 (30 + 15 Φ1 - 29 Φ2) + 19 Φ2) + ηt (-20 ×
        (1 + μ1) + θl (30 + 15 Φ1 + μ1 (30 + 15 Φ1 - 29 Φ2) + 19 Φ2)))) -
x (-1 + η) × (12 × (-1 + η) η^2 θp (-7 + 5 μ1 + 3 η (1 + μ1) - ηt (1 + μ1)) -
  (-1 + ηt) θl (20 × (1 + μ1) + θp (-30 + 24 η^3 (1 + μ1) -
        24 η^2 (7 + μ1) - 15 Φ1 - 19 Φ2 - 2 η (1 + μ1) ×
         (58 + 15 Φ1 + 15 Φ2) + μ1 (-30 - 15 Φ1 + 29 Φ2))))) +
w^3 (-1 + η)^3 (x^2 (-1 + η)^2 θp (40 - 78 θl - 56 μ1 + 18 θl μ1 + 8 η^2 (1 + μ1) +
  8 ηt (1 + μ1) - 8 η (6 + ηt - 6 μ1 + ηt μ1) - 5 θl Φ1 - 5 θl μ1 Φ1 -
  5 θl Φ2 - 5 θl μ1 Φ2 + ηt θl (78 + 5 Φ1 + 5 Φ2 + μ1 (-18 + 5 Φ1 + 5 Φ2))) +
  θp (8 η^4 (1 + μ1) + 60 ηt (1 + μ1) - 4 η^3 (9 - 15 μ1 + 2 ηt (1 + μ1)) +
  η^2 (-48 μ1 - θl (5 × (14 + Φ1 + Φ2) + μ1 (-26 + 5 Φ1 + 5 Φ2)) +
      ηt (4 × (1 + μ1) + 5 θl (14 + Φ1 + Φ2) + θl μ1 (-26 + 5 Φ1 + 5 Φ2))) +
  η (28 - 20 μ1 - θl (146 + 45 Φ1 + μ1 (98 + 45 Φ1 - 87 Φ2) + 57 Φ2) +
      ηt (-56 × (1 + μ1) + θl (146 + 45 Φ1 + μ1 (98 + 45 Φ1 - 87 Φ2) +
            57 Φ2)))) - x (-1 + η) × (4 × (-1 + η) θp (-7 + 5 μ1 +
      4 η^2 (1 + μ1) - ηt (1 + μ1) - η (17 - 31 μ1 + 4 ηt (1 + μ1))) +
  (-1 + ηt) θl (-60 × (1 + μ1) + θp (146 + 45 Φ1 + μ1 (98 + 45 Φ1 - 87 Φ2) +
        57 Φ2 + 2 η (74 + 5 Φ1 + 5 Φ2 + μ1 (-22 + 5 Φ1 + 5 Φ2))))) +
w^2 (-1 + η)^2 (2 x^3 (-1 + η)^3 θp (10 - 17 θl - 14 μ1 + 7 θl μ1 + 2 η^2
      (1 + μ1) - 2 η (6 + ηt - 6 μ1 + ηt μ1) + ηt (2 + 17 θl + 2 μ1 - 7 θl μ1)) -
  x^2 (-1 + η)^2 θp (56 - 142 θl - 40 μ1 - 46 θl μ1 + 12 η^3 (1 + μ1) +
  8 ηt (1 + μ1) - 12 η^2 (4 + ηt - 8 μ1 + ηt μ1) +
  η (-20 - 86 θl - 68 μ1 + 58 θl μ1 + ηt (4 + 86 θl + 4 μ1 - 58 θl μ1)) -
  15 θl Φ1 - 15 θl μ1 Φ1 - 15 θl Φ2 - 15 θl μ1 Φ2 +
  ηt θl (142 + 15 Φ1 + 15 Φ2 + μ1 (46 + 15 Φ1 + 15 Φ2))) +
  x (-1 + η) × (4 × (-1 + η) η θp (3 η^2 (1 + μ1) - 3 η (1 + ηt - 11 μ1 + ηt μ1) -
        4 × (7 + ηt - 5 μ1 + ηt μ1)) - (-1 + ηt) θl (60 × (1 + μ1) + θp (-104 +
          η^2 (-70 + 74 μ1) - 45 Φ1 - 57 Φ2 + μ1 (-104 - 45 Φ1 + 87 Φ2) -
          2 η (142 + 15 Φ1 + 15 Φ2 + μ1 (46 + 15 Φ1 + 15 Φ2))))) +
  θp (-4 η^5 (1 + μ1) - 60 ηt (1 + μ1) + 4 η^4 (ηt - 12 μ1 + ηt μ1) +
  2 η^3 (θl (9 - 15 μ1) + 6 × (5 + μ1) + ηt (2 - 9 θl + 2 μ1 + 15 θl μ1)) +
  η (60 ηt (1 + μ1) + θl (104 + 45 Φ1 + μ1 (104 + 45 Φ1 - 87 Φ2) + 57 Φ2) -
      ηt θl (104 + 45 Φ1 + μ1 (104 + 45 Φ1 - 87 Φ2) + 57 Φ2)) -
  η^2 (56 - 40 μ1 - θl (142 + 15 Φ1 + 15 Φ2 + μ1 (46 + 15 Φ1 + 15 Φ2)) +
      ηt (8 × (1 + μ1) + θl (142 + 15 Φ1 + 15 Φ2 +
            μ1 (46 + 15 Φ1 + 15 Φ2))))))) +
2 cσ^2 (-1 + η) × (2 x^6 (-1 + η)^6 θp (2 - 2 θl - 3 μ1 - 9 w μ1 - 4 w^2 μ1 -
  θl μ1 + w θl μ1 - 17 μ1^2 - 21 w μ1^2 - 4 w^2 μ1^2 + 13 θl μ1^2 +
  13 w θl μ1^2 + w^2 η^4 (1 + μ1) - w η^3 (3 + w (3 + ηt - 4 μ1)) × (1 + μ1) +
  η^2 (2 × (1 + μ1) + 3 w^2 (1 + ηt - 4 μ1) × (1 + μ1) +
```

$$
\begin{aligned}
&3\,w\left(2+\eta t-\mu 1+\eta t\,\mu 1-7\,\mu 1^2\right)+\eta t\left(2\times(1+\mu 1)+w^2\,(1+\mu 1)+\right.\\
&\theta l\left(2+\mu 1-13\,\mu 1^2\right)+w\left(3-(-3+\theta l)\,\mu 1-13\,\theta l\,\mu 1^2\right)\Big)-\eta\left(4+2\,\eta t-\mu 1+\right.\\
&2\,\eta t\,\mu 1-17\,\mu 1^2+w^2\,(1+3\,\eta t-12\,\mu 1)\times(1+\mu 1)+w\left(3+(-15+\theta l)\,\mu 1+\right.\\
&\quad(-42+13\,\theta l)\,\mu 1^2+\eta t\left(6-(-6+\theta l)\,\mu 1-13\,\theta l\,\mu 1^2\right)\Big)\Big)\Big)+\\
x^4\,(-1+\eta)^4\,&\Big(2\times(-1+\eta)\,\theta p\left(-5-23\,\eta-10\,\eta^2+30\,\eta^3-2\,\eta t-20\,\eta\,\eta t-\right.\\
&30\,\eta^2\,\eta t+33\,\mu 1+82\,\eta\,\mu 1+65\,\eta^2\,\mu 1+30\,\eta^3\,\mu 1+2\,\eta t\,\mu 1-18\,\eta\,\eta t\,\mu 1-\\
&30\,\eta^2\,\eta t\,\mu 1+50\,\mu 1^2+225\,\eta\,\mu 1^2+255\,\eta^2\,\mu 1^2-20\,\eta t\,\mu 1^2+2\,\eta\,\eta t\,\mu 1^2+\\
&w^4\,(-1+\eta)^4\,(1+\mu 1)\,(\eta-\eta t+4\,\mu 1)+\mu 2-7\,\eta\,\mu 2-60\,\eta^2\,\mu 2+\\
&16\,\eta t\,\mu 2+30\,\eta\,\eta t\,\mu 2+37\,\mu 1\,\mu 2+101\,\eta\,\mu 1\,\mu 2+60\,\eta^2\,\mu 1\,\mu 2-\\
&20\,\eta t\,\mu 1\,\mu 2-30\,\eta\,\eta t\,\mu 1\,\mu 2-w^3\,(-1+\eta)^3\left(-2+45\,\mu 1+59\,\mu 1^2+\right.\\
&\quad10\,\eta^2\,(1+\mu 1)-14\,\mu 2+58\,\mu 1\,\mu 2-\eta t\,(7+7\,\mu 1-12\,\mu 2+12\,\mu 1\,\mu 2)+\\
&\quad\eta\left(7+47\,\mu 1+40\,\mu 1^2-10\,\eta t\,(1+\mu 1)-12\,\mu 2+12\,\mu 1\,\mu 2\right)\Big)+\\
&w^2\,(-1+\eta)^2\left(-9+113\,\mu 1+182\,\mu 1^2+15\,\eta^3\,(1+\mu 1)-37\,\mu 2+167\right.\\
&\quad\mu 1\,\mu 2-\eta t\left(15+11\,\mu 1+20\,\mu 1^2-40\,\mu 2+44\,\mu 1\,\mu 2\right)+\eta\left(10+195\,\mu 1+\right.\\
&\quad\quad305\,\mu 1^2-77\,\mu 2+187\,\mu 1\,\mu 2-10\,\eta t\,(4+4\,\mu 1-3\,\mu 2+3\,\mu 1\,\mu 2)\Big)-\\
&\quad5\,\eta^2\left(3\,\eta t\,(1+\mu 1)-2\times\left(4+10\,\mu 1+6\,\mu 1^2-3\,\mu 2+3\,\mu 1\,\mu 2\right)\right)\Big)-\\
&w\,(-1+\eta)\times\left(-16+101\,\mu 1+177\,\mu 1^2+45\,\eta^3\,(1+\mu 1)-22\,\mu 2+146\,\mu 1\,\mu 2+\right.\\
&\quad5\,\eta^2\left(10+63\,\mu 1^2-9\,\eta t\,(1+\mu 1)-18\,\mu 2+\mu 1\,(37+18\,\mu 2)\right)-\eta t\left(11+\right.\\
&\quad\quad40\,\mu 1^2-44\,\mu 2+\mu 1\,(3+52\,\mu 2)\Big)+\eta\left(-19+490\,\mu 1^2-72\,\mu 2+3\,\mu 1\right.\\
&\quad\quad(77+92\,\mu 2)+2\,\eta t\left(\mu 1^2-6\,\mu 1\,(4+5\,\mu 2)+5\times(-5+6\,\mu 2)\right)\Big)\Big)\Big)+\\
&(-1+\eta t)\,\theta l\left(4+6\,\theta p+50\,\eta\,\theta p+60\,\eta^2\,\theta p-16\,\mu 1+16\,\eta\,\mu 1+\right.\\
&16\,\eta^2\,\mu 1-22\,\theta p\,\mu 1-92\,\eta\,\theta p\,\mu 1+20\,\eta^2\,\theta p\,\mu 1-140\,\mu 1^2-176\,\eta\,\mu 1^2+\\
&16\,\eta^2\,\mu 1^2-4\,\theta p\,\mu 1^2-262\,\eta\,\theta p\,\mu 1^2-400\,\eta^2\,\theta p\,\mu 1^2+19\,\mu 2-26\,\theta p\,\mu 2-\\
&20\,\eta\,\theta p\,\mu 2+50\,\eta^2\,\theta p\,\mu 2-29\,\mu 1\,\mu 2+22\,\theta p\,\mu 1\,\mu 2-44\,\eta\,\theta p\,\mu 1\,\mu 2-\\
&70\,\eta^2\,\theta p\,\mu 1\,\mu 2+\theta p\,\Phi 1-16\,\theta p\,\mu 1\,\Phi 1-16\,\eta\,\theta p\,\mu 1\,\Phi 1-5\,\eta^2\,\theta p\,\mu 1\,\Phi 1-\\
&41\,\theta p\,\mu 1^2\,\Phi 1-76\,\eta\,\theta p\,\mu 1^2\,\Phi 1-5\,\eta^2\,\theta p\,\mu 1^2\,\Phi 1-5\,\theta p\,\mu 2\,\Phi 1-\\
&5\,\theta p\,\mu 1\,\mu 2\,\Phi 1-\theta p\,\Phi 2+8\,\theta p\,\mu 1\,\Phi 2-6\,\eta\,\theta p\,\mu 1\,\Phi 2-5\,\eta^2\,\theta p\,\mu 1\,\Phi 2+\\
&33\,\theta p\,\mu 1^2\,\Phi 2+54\,\eta\,\theta p\,\mu 1^2\,\Phi 2-5\,\eta^2\,\theta p\,\mu 1^2\,\Phi 2+17\,\theta p\,\mu 2\,\Phi 2+\\
&60\,\eta\,\theta p\,\mu 2\,\Phi 2-7\,\theta p\,\mu 1\,\mu 2\,\Phi 2-60\,\eta\,\theta p\,\mu 1\,\mu 2\,\Phi 2+w^3\,(-1+\eta)^3\\
&\quad\left(-4-\theta p\,\Phi 1+\mu 2\,(-19+5\,\theta p\,(\Phi 1-\Phi 2))+4\,\mu 1^2\,(35+6\,\theta p\,(\Phi 1-\Phi 2))+\right.\\
&\quad\quad\mu 1\,(16+\mu 2\,(29+5\,\theta p\,(\Phi 1-\Phi 2))+11\,\theta p\,(\Phi 1-\Phi 2))+\theta p\,\Phi 2\Big)-w^2\\
&\quad(-1+\eta)^2\left(-12+48\,\mu 1-16\,\eta\,\mu 1+420\,\mu 1^2+176\,\eta\,\mu 1^2-57\,\mu 2+87\,\mu 1\,\mu 2+\right.\\
&\quad\quad\theta p\left(\mu 1^2\,(56+89\,\Phi 1-81\,\Phi 2)+\mu 1\,(26+38\,\Phi 1+3\,\mu 2\,(2+5\,\Phi 1-\Phi 2)-\right.\\
&\quad\quad\quad30\,\Phi 2)+3\times(-2-\Phi 1+\mu 2\,(2+5\,\Phi 1-9\,\Phi 2)+\Phi 2)+\\
&\quad\quad\quad5\,\eta\left(\mu 1^2\,(52+15\,\Phi 1-11\,\Phi 2)-2\times(1+7\,\mu 2+6\,\mu 2\,\Phi 2)+\right.\\
&\quad\quad\quad\mu 1\,(26+34\,\mu 2+3\,\Phi 1+\Phi 2+12\,\mu 2\,\Phi 2)\Big)\Big)\Big)+\\
&w\,(-1+\eta)\times\left(-12+48\,\mu 1-32\,\eta\,\mu 1-16\,\eta^2\,\mu 1+420\,\mu 1^2+\right.\\
&\quad352\,\eta\,\mu 1^2-16\,\eta^2\,\mu 1^2-57\,\mu 2+87\,\mu 1\,\mu 2+\theta p\left(-20+32\,\mu 2-3\,\Phi 1+\right.\\
&\quad\quad15\,\mu 2\,\Phi 1+2\,\mu 1^2\,(30+53\,\Phi 1-45\,\Phi 2)+3\,\Phi 2-39\,\mu 2\,\Phi 2+\\
&\quad\quad5\,\eta^2\left(-10\,\mu 2+\mu 1^2\,(80+\Phi 1+\Phi 2)+\mu 1\,(8+14\,\mu 2+\Phi 1+\Phi 2)\right)+\\
&\quad\quad\mu 1\,(40+43\,\Phi 1-27\,\Phi 2+\mu 2\,(-16+15\,\Phi 1+9\,\Phi 2))+\\
&\quad\quad\eta\left(\mu 1^2\,(522+151\,\Phi 1-109\,\Phi 2)-10\times(6+5\,\mu 2+12\,\mu 2\,\Phi 2)+\right.\\
&\quad\quad\quad\mu 1\,(222+214\,\mu 2+31\,\Phi 1+11\,\Phi 2+120\,\mu 2\,\Phi 2)\Big)\Big)\Big)\Big)+\\
x^3\,(-1+\eta)^3\,&\Big(-\Big((-1+\eta)\,\theta p\left(-4-40\,\eta-84\,\eta^2+80\,\eta^4+4\,\eta t-16\,\eta\,\eta t-\right.
\end{aligned}
$$

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80 η^2 ηt - 80 η^3 ηt + 40 μ1 + 264 η μ1 + 336 η^2 μ1 + 200 η^3 μ1 + 80 η^4 μ1 +
16 η ηt μ1 - 64 η^2 ηt μ1 - 80 η^3 ηt μ1 + 44 μ1^2 + 400 η μ1^2 + 900 η^2 μ1^2 +
680 η^3 μ1^2 - 148 ηt μ1^2 - 160 η ηt μ1^2 + 16 η^2 ηt μ1^2 + 12 μ2 + 8 η μ2 -
116 η^2 μ2 - 240 η^3 μ2 + 39 ηt μ2 + 128 η ηt μ2 + 120 η^2 ηt μ2 +
12 μ1 μ2 + 296 η μ1 μ2 + 508 η^2 μ1 μ2 + 240 η^3 μ1 μ2 - 57 ηt μ1 μ2 -
160 η ηt μ1 μ2 - 120 η^2 ηt μ1 μ2 + 2 w^4 (-1 + η)^4 (-1 + 18 μ1 + 19 μ1^2 +
    4 η^2 (1 + μ1) - 7 μ2 + 29 μ1 μ2 - 2 ηt (1 + μ1 - 3 μ2 + 3 μ1 μ2) +
    2 η (1 + 8 μ1^2 - 2 ηt (1 + μ1) - 3 μ2 + 3 μ1 (3 + μ2))) +
w^2 (-1 + η)^2 (-30 + 268 μ1 + 394 μ1^2 + 40 η^4 (1 + μ1) - 38 μ2 +
    370 μ1 μ2 - 40 η^3 (-4 + ηt - 8 μ1 + ηt μ1 - 4 μ1^2 + 3 μ2 - 3 μ1 μ2) -
    ηt (8 + 20 μ1 + 444 μ1^2 - 177 μ2 + 231 μ1 μ2) -
    4 η^2 (-25 - 210 μ1 - 305 μ1^2 + 119 μ2 - 229 μ1 μ2 + 10 ηt
        (4 + 4 μ1 - 3 μ2 + 3 μ1 μ2)) - 4 η (13 - 231 μ1 - 364 μ1^2 + 98
        μ2 - 358 μ1 μ2 + ηt (30 + 22 μ1 + 40 μ1^2 - 80 μ2 + 88 μ1 μ2))) -
w^3 (-1 + η)^3 (40 η^3 (1 + μ1) + 8 η^2 (7 + 20 μ1^2 - 5 ηt (1 + μ1) - 12 μ2 +
        3 μ1 (9 + 4 μ2)) + 4 × (-3 + 58 μ1^2 - 14 μ2 + μ1 (43 + 70 μ2)) -
    ηt (12 + 148 μ1^2 - 87 μ2 + μ1 (16 + 105 μ2)) - 4 η (-118 μ1^2 +
        43 μ2 - μ1 (94 + 131 μ2) + 2 ηt (7 - 12 μ2 + μ1 (7 + 12 μ2)))) -
w (-1 + η) × (120 η^4 (1 + μ1) + 40 η^3 (5 + 21 μ1^2 - 3 ηt (1 + μ1) - 9 μ2 +
        μ1 (14 + 9 μ2)) + 4 × (-6 + 61 μ1^2 + 4 μ2 + μ1 (43 + 40 μ2)) +
    ηt (4 - 444 μ1^2 + 141 μ2 - μ1 (8 + 195 μ2)) + 8 η^2
      (-4 + 245 μ1^2 - 62 μ2 + μ1 (121 + 166 μ2) + ηt (-25 - 23 μ1 +
            2 μ1^2 + 30 μ2 - 30 μ1 μ2)) - 8 η (15 - 177 μ1^2 + 28 μ2 - 2 μ1
        (51 + 76 μ2) + ηt (11 + 40 μ1^2 - 44 μ2 + μ1 (3 + 52 μ2)))))) +
(-1 + ηt) θl (-6 - 12 η + 2 θp - 24 η θp - 100 η^2 θp - 80 η^3 θp +
    56 μ1 + 76 η μ1 - 24 η^2 μ1 - 24 η^3 μ1 - 18 θp μ1 + 86 η θp μ1 + 188 η^2 θp μ1 -
    20 η^3 θp μ1 + 86 μ1^2 + 400 η μ1^2 + 264 η^2 μ1^2 - 24 η^3 μ1^2 - 44 θp μ1^2 +
    14 η θp μ1^2 + 528 η^2 θp μ1^2 + 540 η^3 θp μ1^2 - 38 μ2 - 57 η μ2 + 34 θp μ2 +
    114 η θp μ2 + 20 η^2 θp μ2 - 100 η^3 θp μ2 + 58 μ1 μ2 + 87 η μ1 μ2 -
    62 θp μ1 μ2 - 102 η θp μ1 μ2 + 116 η^2 θp μ1 μ2 + 140 η^3 θp μ1 μ2 +
    w^4 (-1 + η)^4 (-2 + 70 μ1^2 - 5 μ2 - μ1 (4 + 5 μ2)) - 2 θp Φ1 - 4 η θp Φ1 +
    23 θp μ1 Φ1 + 63 η θp μ1 Φ1 + 34 η^2 θp μ1 Φ1 + 10 η^3 θp μ1 Φ1 +
    37 θp μ1^2 Φ1 + 163 η θp μ1^2 Φ1 + 154 η^2 θp μ1^2 Φ1 + 10 η^3 θp μ1^2 Φ1 +
    10 θp μ2 Φ1 + 20 η θp μ2 Φ1 + 10 θp μ1 μ2 Φ1 + 20 η θp μ1 μ2 Φ1 +
    2 θp Φ2 + 4 η θp Φ2 - 19 θp μ1 Φ2 - 33 η θp μ1 Φ2 + 14 η^2 θp μ1 Φ2 +
    10 η^3 θp μ1 Φ2 - 33 θp μ1^2 Φ2 - 133 η θp μ1^2 Φ2 - 106 η^2 θp μ1^2 Φ2 +
    10 η^3 θp μ1^2 Φ2 + 2 θp μ2 Φ2 - 68 η θp μ2 Φ2 - 120 η^2 θp μ2 Φ2 -
    22 θp μ1 μ2 Φ2 + 28 η θp μ1 μ2 Φ2 + 120 η^2 θp μ1 μ2 Φ2 - w^3 (-1 + η)^3
      (-12 - 53 μ2 - 2 θp Φ1 + 10 θp μ2 Φ1 + 4 μ1^2 (89 + 12 θp (Φ1 - Φ2)) +
        μ1 (56 + μ2 (43 + 10 θp (Φ1 - Φ2)) + 22 θp (Φ1 - Φ2)) +
        2 θp Φ2 - 10 θp μ2 Φ2 + η (-12 - 57 μ2 - 4 θp Φ1 + 20 θp μ2 Φ1 +
            12 μ1^2 (33 + 8 θp (Φ1 - Φ2)) + μ1 (72 + μ2 (87 + 20 θp (Φ1 - Φ2)) +
                44 θp (Φ1 - Φ2)) + 4 θp Φ2 - 20 θp μ2 Φ2)) +
    w^2 (-1 + η)^2 (3 × (-8 + 196 μ1^2 - 43 μ2 + μ1 (60 + 53 μ2)) +
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θp (μ1^2 (-44 + 133 Φ1 - 129 Φ2) + μ1 (-26 + 67 Φ1 + 6 μ2 (-15 + 5 Φ1 -
            7 Φ2) - 63 Φ2) + 6 × (-1 - Φ1 + μ2 (9 + 5 Φ1 - 3 Φ2) + Φ2)) +
      η (9 × (-4 + 132 μ1^2 - 19 μ2 + μ1 (24 + 29 μ2)) + 4 θp
          (μ1^2 (56 + 89 Φ1 - 81 Φ2) + μ1 (26 + 38 Φ1 + 3 μ2 (2 + 5 Φ1 - Φ2) -
            30 Φ2) + 3 × (-2 - Φ1 + μ2 (2 + 5 Φ1 - 9 Φ2) + Φ2)) + 2 η^2
        (12 μ1 (-1 + 11 μ1) + 5 θp (μ1^2 (52 + 15 Φ1 - 11 Φ2) - 2 × (1 + 7
              μ2 + 6 μ2 Φ2) + μ1 (26 + 34 μ2 + 3 Φ1 + Φ2 + 12 μ2 Φ2)))) -
   w (-1 + η) × (-20 + 176 μ1 + 388 μ1^2 - 119 μ2 + 169 μ1 μ2 +
      2 θp (-2 - 3 Φ1 + μ1^2 (-44 + 61 Φ1 - 57 Φ2) + μ1 (-22 + 34 Φ1 +
            μ2 (-76 + 15 Φ1 - 27 Φ2) - 30 Φ2) + μ2 (44 + 15 Φ1 - 3 Φ2) +
          3 Φ2) + 2 η^3 (-50 θp μ2 + μ1^2 (-12 + 5 θp (54 + Φ1 + Φ2)) +
          μ1 (-12 + 5 θp (6 + 14 μ2 + Φ1 + Φ2))) + 8 η^2 (6 μ1 (-1 + 11 μ1) +
          θp (μ1^2 (131 + 38 Φ1 - 27 Φ2) - 15 × (1 + μ2 + 2 μ2 Φ2) +
              μ1 (56 + 57 μ2 + 8 Φ1 + 3 Φ2 + 30 μ2 Φ2)) +
      η (1192 μ1^2 - 9 × (4 + 19 μ2) + μ1 (220 + 261 μ2) +
          θp (μ1^2 (238 + 423 Φ1 - 361 Φ2) +
              2 × (-40 - 6 Φ1 + μ2 (69 + 30 Φ1 - 78 Φ2) + 6 Φ2) + μ1
               (158 + 171 Φ1 - 109 Φ2 + 6 μ2 (-13 + 10 Φ1 + 6 Φ2)))))) +
θp (w^4 (-1 + η)^5 (2 η^5 (1 + μ1) + 5 ηt (1 + μ1) μ2 + 2 η ηt (1 - 23 μ1^2 +
      5 μ1 (-2 + μ2) + 5 μ2) - 2 η^4 (-2 - 4 μ1^2 + ηt (1 + μ1) +
      6 μ2 - 6 μ1 (1 + μ2)) + η^2 (-2 + (30 - 70 ηt) μ1^2 +
      (10 + 17 ηt) μ2 + μ1 (28 + ηt (2 - 7 μ2) + 34 μ2)) -
   2 η^3 (-19 μ1^2 + 13 μ2 - μ1 (19 + 35 μ2) + 2 ηt (1 + μ1 - 3 μ2 + 3 μ1 μ2))) -
 w^3 (-1 + η)^3 (4 η^7 (1 + μ1) - 15 ηt (1 + μ1) μ2 + 2 η ηt
      (-4 + 80 μ1^2 - 17 μ2 + μ1 (40 + 7 μ2)) +
      2 η^6 (5 + 8 μ1^2 - 2 ηt (1 + μ1) - 12 μ2 + μ1 (13 + 12 μ2)) - 2 η^5
      (1 - 51 μ1^2 + 32 μ2 - 38 μ1 (1 + 2 μ2) + ηt (5 - 12 μ2 + μ1 (5 + 12 μ2))) +
      η^4 (-18 - 4 μ2 - θl Φ1 + 5 θl μ2 Φ1 + 6 μ1^2 (19 + 4 θl (Φ1 - Φ2)) +
          μ1 (72 + 5 μ2 (28 + θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) + θl Φ2 -
          5 θl μ2 Φ2 + ηt (2 + θl Φ1 - 4 μ1^2 (31 + 6 θl (Φ1 - Φ2)) -
              μ1 (26 + μ2 (81 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) - θl Φ2 +
              μ2 (63 - 5 θl Φ1 + 5 θl Φ2))) - 2 η^3 (1 - 52 μ2 + θl Φ1 -
          5 θl μ2 Φ1 + μ1^2 (51 - 24 θl (Φ1 - Φ2)) - θl Φ2 + 5 θl μ2 Φ2 + ηt
            (-9 - θl Φ1 + 5 μ2 (-1 + θl (Φ1 - Φ2)) + 12 μ1^2 (9 + 2 θl (Φ1 - Φ2)) +
              μ1 (15 + 5 μ2 (-1 + θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) + θl Φ2) +
          μ1 (40 - 11 θl (Φ1 - Φ2) + μ2 (104 - 5 θl Φ1 + 5 θl Φ2))) -
      η^2 (-8 + 12 μ2 + θl Φ1 - 5 θl μ2 Φ1 + μ1^2 (130 - 24 θl (Φ1 - Φ2)) -
          θl Φ2 + 5 θl μ2 Φ2 + ηt (-2 - θl Φ1 + 12 μ1^2
               (-15 + 2 θl (Φ1 - Φ2)) + μ2 (48 + 5 θl (Φ1 - Φ2)) +
              μ1 (10 + μ2 (-96 + 5 θl (Φ1 - Φ2)) + 11 θl (Φ1 - Φ2)) + θl Φ2) +
          μ1 (98 - 11 θl (Φ1 - Φ2) + μ2 (108 - 5 θl Φ1 + 5 θl Φ2))) +
 w^2 (-1 + η)^2 (2 η^8 (1 + μ1) - 15 ηt (1 + μ1) μ2 - 2 η^7
      (-7 + ηt - 11 μ1 + ηt μ1 - 4 μ1^2 + 6 μ2 - 6 μ1 μ2) +
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    12 η ηt (-1 + 17 μ1^2 - 6 μ2 + 2 μ1 (5 + 3 μ2)) +
    2 η^6 (6 + 57 μ1^2 - 43 μ2 + 13 μ1 (3 + 5 μ2) - ηt (7 - 6 μ2 + μ1 (7 + 6 μ2))) +
    η^4 (-28 + 26 μ1 + 30 μ1^2 + 108 μ2 - 36 μ1 μ2 +
      θl (μ1^2 (56 + 89 Φ1 - 81 Φ2) + μ1 (26 + 38 Φ1 + 3 μ2 (2 + 5 Φ1 - Φ2) -
            30 Φ2) + 3 × (-2 - Φ1 + μ2 (2 + 5 Φ1 - 9 Φ2) + Φ2)) -
      ηt (-22 + 70 μ1 + 332 μ1^2 - 97 μ2 + 143 μ1 μ2 + θl
          (μ1^2 (56 + 89 Φ1 - 81 Φ2) + μ1 (26 + 38 Φ1 + 3 μ2 (2 + 5 Φ1 - Φ2) -
                30 Φ2) + 3 × (-2 - Φ1 + μ2 (2 + 5 Φ1 - 9 Φ2) + Φ2)))) -
    η^2 (2 × (-7 + 53 μ1 + 72 μ1^2 + 7 μ2 + 43 μ1 μ2) + ηt (8 - 340 μ1^2 +
          94 μ2 - 2 μ1 (46 + 85 μ2) + θl (-2 - 3 Φ1 + μ1^2 (-48 + 59 Φ1 -
                59 Φ2) + μ1 (-26 + 32 Φ1 + μ2 (-62 + 15 Φ1 - 27 Φ2) -
                32 Φ2) + μ2 (34 + 15 Φ1 - 3 Φ2) + 3 Φ2)) + θl (2 + 3 Φ1 -
          3 Φ2 + μ2 (-34 - 15 Φ1 + 3 Φ2) + μ1^2 (48 - 59 Φ1 + 59 Φ2) +
          μ1 (26 - 32 Φ1 + 32 Φ2 + μ2 (62 - 15 Φ1 + 27 Φ2)))) +
    η^3 (12 - 250 μ1^2 + 76 μ2 + 4 ηt (7 - 43 μ1^2 + μ1 (-30 + μ2) + μ2) -
      2 μ1 (83 + 154 μ2) + θl μ1^2 (-44 + 133 Φ1 - 129 Φ2) +
      θl μ1 (-26 + 67 Φ1 + 6 μ2 (-15 + 5 Φ1 - 7 Φ2) - 63 Φ2) +
      6 θl (-1 - Φ1 + μ2 (9 + 5 Φ1 - 3 Φ2) + Φ2) +
      ηt θl (-6 × (-1 - Φ1 + μ2 (9 + 5 Φ1 - 3 Φ2) + Φ2) + μ1^2 (44 - 133 Φ1 +
            129 Φ2) + μ1 (26 - 67 Φ1 + 63 Φ2 + μ2 (90 - 30 Φ1 + 42 Φ2)))) -
    η^5 (26 - 144 μ1 - 242 μ1^2 + 72 μ2 - 288 μ1 μ2 - θl (μ1^2
            (52 + 15 Φ1 - 11 Φ2) - 2 × (1 + 7 μ2 + 6 μ2 Φ2) +
          μ1 (26 + 34 μ2 + 3 Φ1 + Φ2 + 12 μ2 Φ2)) + ηt (14 + 6 μ1 + 40 μ1^2 -
          68 μ2 + 76 μ1 μ2 + θl (μ1^2 (52 + 15 Φ1 - 11 Φ2) - 2 × (1 + 7 μ2 +
                6 μ2 Φ2) + μ1 (26 + 34 μ2 + 3 Φ1 + Φ2 + 12 μ2 Φ2)))) -
  w (-1 + η) × (6 η^8 (1 + μ1) - 5 ηt (1 + μ1) μ2 + η^7 (14 + 42 μ1^2 -
        6 ηt (1 + μ1) - 36 μ2 + 4 μ1 (8 + 9 μ2)) +
    2 η ηt (-4 + 56 μ1^2 - 31 μ2 + μ1 (40 + 41 μ2)) +
    η^6 (-2 × (5 + (38 + 5 θl) μ2) + μ1^2 (154 + θl (28 + Φ1 + Φ2)) +
      μ1 (72 + 164 μ2 + θl (4 + 14 μ2 + Φ1 + Φ2)) -
      ηt (14 - 2 × (12 + 5 θl) μ2 + μ1^2 (-4 + θl (28 + Φ1 + Φ2)) +
          μ1 (10 + 24 μ2 + θl (4 + 14 μ2 + Φ1 + Φ2)))) -
    η^2 (4 × (1 + μ1) × (-1 + 11 μ1 + 3 μ2) + ηt (-4 × (-3 + 32 μ1 + 59 μ1^2 -
                18 μ2 + 30 μ1 μ2) + θl (4 - 3 Φ1 + μ1^2 (-70 + 46 Φ1 - 46 Φ2) +
                μ1 (-42 + 31 Φ1 + 3 μ2 (-32 + 5 Φ1 - 13 Φ2) - 31 Φ2) +
                3 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2)) + θl (-4 + 3 Φ1 - 3 Φ2 -
          3 μ2 (16 + 5 Φ1 + 3 Φ2) + μ1^2 (70 - 46 Φ1 + 46 Φ2) +
          μ1 (42 - 31 Φ1 + 31 Φ2 + μ2 (96 - 15 Φ1 + 39 Φ2)))) -
    η^3 (4 × (-5 + 50 μ1^2 + 6 μ2 + μ1 (33 + 30 μ2)) + ηt (2 × (-8 - 14 μ1^2 + μ2 +
                μ1 (62 + μ2)) + θl (-4 - 6 Φ1 + μ1^2 (-90 + 121 Φ1 - 115 Φ2) +
                μ1 (-46 + 67 Φ1 + 2 μ2 (-83 + 15 Φ1 - 27 Φ2) - 61 Φ2) +
                μ2 (98 + 30 Φ1 - 6 Φ2) + 6 Φ2)) + θl (4 + 6 Φ1 - 6 Φ2 +
          μ2 (-98 - 30 Φ1 + 6 Φ2) + μ1^2 (90 - 121 Φ1 + 115 Φ2) +
```

```
                μ1 (46 - 67 Φ1 + 61 Φ2 + μ2 (166 - 30 Φ1 + 54 Φ2)))) -
          η^4 (2 × (55 μ1^2 - 64 μ2 + μ1 (19 + 104 μ2)) - θl (-20 - 3 Φ1 +
                μ1^2 (58 + 105 Φ1 - 91 Φ2) + 3 μ2 (14 + 5 Φ1 - 13 Φ2) +
                3 Φ2 + μ1 (38 + 42 Φ1 - 28 Φ2 + 3 μ2 (-10 + 5 Φ1 + 3 Φ2))) +
            ηt (-26 + 78 μ1 + 296 μ1^2 - 53 μ2 + 91 μ1 μ2 + θl (-20 -
                    3 Φ1 + μ1^2 (58 + 105 Φ1 - 91 Φ2) + 3 μ2 (14 + 5 Φ1 - 13 Φ2) +
                    3 Φ2 + μ1 (38 + 42 Φ1 - 28 Φ2 + 3 μ2 (-10 + 5 Φ1 + 3 Φ2))))) +
          η^5 (-34 + 158 μ1^2 + 20 μ2 + 20 μ1 (5 + 7 μ2) + θl (μ1^2 (106 +
                    31 Φ1 - 21 Φ2) - 6 × (2 + μ2 (3 + 4 Φ2)) + μ1 (46 + 7 Φ1 + 3 Φ2 +
                    6 μ2 (9 + 4 Φ2))) - ηt (2 - 10 μ1 + 84 μ1^2 - 64 μ2 + 80 μ1 μ2 +
                θl (μ1^2 (106 + 31 Φ1 - 21 Φ2) - 6 × (2 + μ2 (3 + 4 Φ2)) +
                    μ1 (46 + 7 Φ1 + 3 Φ2 + 6 μ2 (9 + 4 Φ2))))))) +
        η (4 η^7 (1 + μ1) + η^6 (34 μ1^2 - 4 ηt (1 + μ1) - 24 μ2 + 2 μ1 (5 + 12 μ2)) +
          ηt (-2 + 22 μ1^2 - 19 μ2 + μ1 (20 + 29 μ2)) + η^5 (4 ηt (-1 + μ1) ×
                (1 + μ1 - 3 μ2) + 2 × (-5 + 28 μ1^2 - 7 μ2 + μ1 (11 + 29 μ2)) +
            θl (-2 × (2 + 5 μ2) + μ1^2 (28 + Φ1 + Φ2) + μ1 (14 μ2 + Φ1 + Φ2)) -
            ηt θl (-2 × (2 + 5 μ2) + μ1^2 (28 + Φ1 + Φ2) + μ1 (14 μ2 + Φ1 + Φ2)) +
          η (θl (2 - Φ1 + 11 μ1^2 (-2 + Φ1 - Φ2) + Φ2 + μ2 (14 + 5 Φ1 + 7 Φ2) +
                μ1 (5 μ2 Φ1 + 10 × (-2 + Φ1 - Φ2) - 17 μ2 (2 + Φ2))) +
            ηt (-4 + 48 μ1 + 52 μ1^2 - 19 μ2 + 29 μ1 μ2 + θl (-2 + Φ1 -
                    5 μ2 Φ1 - 5 μ1 μ2 Φ1 - 11 μ1^2 (-2 + Φ1 - Φ2) - Φ2 -
                    7 μ2 (2 + Φ2) + 17 μ1 μ2 (2 + Φ2) + 10 μ1 (2 - Φ1 + Φ2)))) -
          2 η^4 (2 - 15 μ1 - 5 μ1^2 - 20 μ2 + 4 μ1 μ2 - θl (-5 - 2 μ2 + μ1^2 (27 +
                    8 Φ1 - 5 Φ2) - 6 μ2 Φ2 + μ1 (10 + 10 μ2 + 2 Φ1 + Φ2 + 6 μ2 Φ2)) +
            ηt (2 × (-1 + 11 μ1^2 - 5 μ2 + μ1 (-2 + 7 μ2)) + θl
                (-5 - 2 μ2 + μ1^2 (27 + 8 Φ1 - 5 Φ2) - 6 μ2 Φ2 +
                    μ1 (10 + 10 μ2 + 2 Φ1 + Φ2 + 6 μ2 Φ2)))) -
          η^2 (-4 + 40 μ1 + 44 μ1^2 + 32 μ2 - 16 μ1 μ2 - 2 θl (1 - Φ1 +
                μ1^2 (-23 + 18 Φ1 - 17 Φ2) + Φ2 + μ2 (22 + 5 Φ1 + Φ2) +
                μ1 (11 Φ1 + μ2 (-38 + 5 Φ1 - 11 Φ2) - 10 × (1 + Φ2))) +
            ηt (-2 + 40 μ1 - 54 μ1^2 + μ2 + μ1 μ2 + 2 θl (1 - Φ1 +
                    μ1^2 (-23 + 18 Φ1 - 17 Φ2) + Φ2 + μ2 (22 + 5 Φ1 + Φ2) +
                    μ1 (11 Φ1 + μ2 (-38 + 5 Φ1 - 11 Φ2) - 10 × (1 + Φ2)))) -
          η^3 (-6 + 26 μ1 + 56 μ1^2 - 30 μ2 + 90 μ1 μ2 - θl (-6 - Φ1 +
                μ1^2 (2 + 40 Φ1 - 34 Φ2) + μ2 (36 + 5 Φ1 - 17 Φ2) + Φ2 +
                μ1 (20 + 15 Φ1 - 9 Φ2 + μ2 (-36 + 5 Φ1 + 7 Φ2))) +
            ηt (-8 + 32 μ1 + 88 μ1^2 - 7 μ2 + 17 μ1 μ2 + θl (-6 - Φ1 +
                    μ1^2 (2 + 40 Φ1 - 34 Φ2) + μ2 (36 + 5 Φ1 - 17 Φ2) + Φ2 +
                    μ1 (20 + 15 Φ1 - 9 Φ2 + μ2 (-36 + 5 Φ1 + 7 Φ2)))))) -
    x^2 (-1 + η)^2 (-((-1 + η) θp (-12 η - 60 η^2 - 76 η^3 + 20 η^4 + 60 η^5 +
            6 ηt + 12 η ηt - 24 η^2 ηt - 80 η^3 ηt - 60 η^4 ηt + 120 η μ1 +
            396 η^2 μ1 + 344 η^3 μ1 + 170 η^4 μ1 + 60 η^5 μ1 - 44 ηt μ1 -
            28 η ηt μ1 + 24 η^2 ηt μ1 - 56 η^3 ηt μ1 - 60 η^4 ηt μ1 + 132 η μ1^2 +
```

$$
\begin{aligned}
&600\,\eta^2\,\mu1^2 + 900\,\eta^3\,\mu1^2 + 510\,\eta^4\,\mu1^2 - 98\,\eta t\,\mu1^2 - 424\,\eta\,\eta t\,\mu1^2 - \\
&240\,\eta^2\,\eta t\,\mu1^2 + 24\,\eta^3\,\eta t\,\mu1^2 + 56\,\eta\,\mu2 + 12\,\eta^2\,\mu2 - 204\,\eta^3\,\mu2 - \\
&240\,\eta^4\,\mu2 + 38\,\eta t\,\mu2 + 117\,\eta\,\eta t\,\mu2 + 192\,\eta^2\,\eta t\,\mu2 + 120\,\eta^3\,\eta t\,\mu2 + \\
&8\,\eta\,\mu1\,\mu2 + 444\,\eta^2\,\mu1\,\mu2 + 612\,\eta^3\,\mu1\,\mu2 + 240\,\eta^4\,\mu1\,\mu2 - \\
&58\,\eta t\,\mu1\,\mu2 - 171\,\eta\,\eta t\,\mu1\,\mu2 - 240\,\eta^2\,\eta t\,\mu1\,\mu2 - 120\,\eta^3\,\eta t\,\mu1\,\mu2 + \\
&w^4\,(-1+\eta)^4\,\big(-2 + (30 - 82\,\eta t)\,\mu1^2 + 12\,\eta^3\,(1+\mu1) + 10\,\mu2 + \\
&\quad 17\,\eta t\,\mu2 + \mu1\,(28 - 7\,\eta t\,(-2+\mu2) + 34\,\mu2) - 12\,\eta^2 \\
&\quad\quad \big(-1 + \eta t - 5\,\mu1 + \eta t\,\mu1 - 4\,\mu1^2 + 3\,\mu2 - 3\,\mu1\,\mu2\big) - 2\,\eta\,\big(2 - 55\,\mu1 - \\
&\quad\quad\quad 57\,\mu1^2 + 27\,\mu2 - 93\,\mu1\,\mu2 + 6\,\eta t\,(1 + \mu1 - 3\,\mu2 + 3\,\mu1\,\mu2)\big)\big) + \\
&w^2\,(-1+\eta)^2\,\big(30\,\eta^5\,(1+\mu1) + \eta t\,\big(20 - 104\,\mu1 - 652\,\mu1^2 + 181 \\
&\quad\quad\quad \mu2 - 227\,\mu1\,\mu2\big) + 2\times\big(-7 + 53\,\mu1 + 72\,\mu1^2 + 7\,\mu2 + 43\,\mu1\,\mu2\big) - \\
&\quad 3\,\eta\,\eta t\,\big(8 + 420\,\mu1^2 - 177\,\mu2 + 11\,\mu1\,(4 + 21\,\mu2)\big) + \\
&\quad 2\,\eta\,\big(-43 + 591\,\mu1^2 - 69\,\mu2 + \mu1\,(404 + 567\,\mu2)\big) - \\
&\quad 4\,\eta^3\,\big(-40 - 225\,\mu1 - 305\,\mu1^2 + 161\,\mu2 - 271\,\mu1\,\mu2 + \\
&\quad\quad 10\,\eta t\,(4 + 4\,\mu1 - 3\,\mu2 + 3\,\mu1\,\mu2)\big) - 10\,\eta^4 \\
&\quad\quad \big(3\,\eta t\,(1+\mu1) - 4\times\big(4 + 7\,\mu1 + 3\,\mu1^2 - 3\,\mu2 + 3\,\mu1\,\mu2\big)\big) - \\
&\quad 12\,\eta^2\,\big(4 - 118\,\mu1 - 182\,\mu1^2 + 61\,\mu2 - 191\,\mu1\,\mu2 + \\
&\quad\quad \eta t\,\big(15 + 11\,\mu1 + 20\,\mu1^2 - 40\,\mu2 + 44\,\mu1\,\mu2\big)\big)\big) - w^3\,(-1+\eta)^3 \\
&\quad \big(40\,\eta^4\,(1+\mu1) + 4\,\eta^3\,\big(21 + 61\,\mu1 + 40\,\mu1^2 - 10\,\eta t\,(1+\mu1) - \\
&\quad\quad 36\,\mu2 + 36\,\mu1\,\mu2\big) + \eta t\,\big(6 - 400\,\mu1^2 + 97\,\mu2 - 5\,\mu1\,(2 + 19\,\mu2)\big) + \\
&\quad 2\times\big(-4 + 65\,\mu1^2 + 6\,\mu2 + \mu1\,(49 + 54\,\mu2)\big) + 12\,\eta^2\,\big(2 + 49\,\mu1 + \\
&\quad\quad 59\,\mu1^2 - 29\,\mu2 + 73\,\mu1\,\mu2 - \eta t\,(7 + 7\,\mu1 - 12\,\mu2 + 12\,\mu1\,\mu2)\big) - \\
&\quad 3\,\eta\,\big(10 - 232\,\mu1^2 + 68\,\mu2 - 2\,\mu1\,(87 + 146\,\mu2) + \\
&\quad\quad \eta t\,\big(12 + 140\,\mu1^2 - 87\,\mu2 + 3\,\mu1\,(8 + 35\,\mu2)\big)\big)\big) - \\
&w\,(-1+\eta)\times\big(90\,\eta^5\,(1+\mu1) + 4\times(1+\mu1)\times(-1 + 11\,\mu1 + 3\,\mu2) + \\
&\quad \eta t\,\big(20 - 124\,\mu1 - 432\,\mu1^2 + 139\,\mu2 - 197\,\mu1\,\mu2\big) + \\
&\quad 10\,\eta^4\,\big(20 + 47\,\mu1 + 63\,\mu1^2 - 9\,\eta t\,(1+\mu1) - 36\,\mu2 + 36\,\mu1\,\mu2\big) + \\
&\quad 4\,\eta^3\,\big(3 + 253\,\mu1 + 490\,\mu1^2 - 176\,\mu2 + 388\,\mu1\,\mu2 + \\
&\quad\quad \eta t\,\big(-50 - 44\,\mu1 + 6\,\mu1^2 + 60\,\mu2 - 60\,\mu1\,\mu2\big)\big) - \\
&\quad 12\,\eta^2\,\big(14 - 103\,\mu1 - 177\,\mu1^2 + 34\,\mu2 - 158\,\mu1\,\mu2 + \\
&\quad\quad \eta t\,\big(11 + 3\,\mu1 + 40\,\mu1^2 - 44\,\mu2 + 52\,\mu1\,\mu2\big)\big) + \\
&\quad \eta\,\big(-72 + 516\,\mu1 + 732\,\mu1^2 + 68\,\mu2 + 452\,\mu1\,\mu2 + \\
&\quad\quad \eta t\,\big(12 - 1264\,\mu1^2 + 423\,\mu2 - 5\,\mu1\,(20 + 117\,\mu2)\big)\big)\big)\big) + \\
&(-1+\eta t)\,\theta l\,\big(-2 - 12\,\eta - 12\,\eta^2 + 2\,\theta p + 6\,\eta\,\theta p - 36\,\eta^2\,\theta p - 100\,\eta^3\,\theta p - \\
&\quad 60\,\eta^4\,\theta p + 20\,\mu1 + 136\,\eta\,\mu1 + 104\,\eta^2\,\mu1 - 16\,\eta^3\,\mu1 - 16\,\eta^4\,\mu1 - \\
&\quad 20\,\theta p\,\mu1 - 56\,\eta\,\theta p\,\mu1 + 126\,\eta^2\,\theta p\,\mu1 + 192\,\eta^3\,\theta p\,\mu1 - 10\,\eta^4\,\theta p\,\mu1 + \\
&\quad 22\,\mu1^2 + 148\,\eta\,\mu1^2 + 380\,\eta^2\,\mu1^2 + 176\,\eta^3\,\mu1^2 - 16\,\eta^4\,\mu1^2 - 22\,\theta p\,\mu1^2 - \\
&\quad 134\,\eta\,\theta p\,\mu1^2 + 18\,\eta^2\,\theta p\,\mu1^2 + 532\,\eta^3\,\theta p\,\mu1^2 + 410\,\eta^4\,\theta p\,\mu1^2 + \\
&\quad 2\,w^4\,(-1+\eta)^4\,\big(-1 + 23\,\mu1^2 + \eta\,\big(-2 + 64\,\mu1^2 + \mu1\,(2 - 5\,\mu2) - 5\,\mu2\big) - \\
&\quad\quad 5\,\mu1\,(-2+\mu2) - 5\,\mu2\big) - 19\,\mu2 - 76\,\eta\,\mu2 - 57\,\eta^2\,\mu2 + \\
&\quad 14\,\theta p\,\mu2 + 112\,\eta\,\theta p\,\mu2 + 186\,\eta^2\,\theta p\,\mu2 - 100\,\eta^4\,\theta p\,\mu2 + 29\,\mu1\,\mu2 + \\
&\quad 116\,\eta\,\mu1\,\mu2 + 87\,\eta^2\,\mu1\,\mu2 - 34\,\theta p\,\mu1\,\mu2 - 200\,\eta\,\theta p\,\mu1\,\mu2 - \\
&\quad 174\,\eta^2\,\theta p\,\mu1\,\mu2 + 144\,\eta^3\,\theta p\,\mu1\,\mu2 + 140\,\eta^4\,\theta p\,\mu1\,\mu2 - \\
&\quad \theta p\,\Phi1 - 6\,\eta\,\theta p\,\Phi1 - 6\,\eta^2\,\theta p\,\Phi1 + 10\,\theta p\,\mu1\,\Phi1 + 68\,\eta\,\theta p\,\mu1\,\Phi1 +
\end{aligned}
$$

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93 η^2 θp μ1 Φ1 + 36 η^3 θp μ1 Φ1 + 10 η^4 θp μ1 Φ1 + 11 θp μ1^2 Φ1 +
110 η θp μ1^2 Φ1 + 243 η^2 θp μ1^2 Φ1 + 156 η^3 θp μ1^2 Φ1 +
10 η^4 θp μ1^2 Φ1 + 5 θp μ2 Φ1 + 30 η θp μ2 Φ1 + 30 η^2 θp μ2 Φ1 +
5 θp μ1 μ2 Φ1 + 30 η θp μ1 μ2 Φ1 + 30 η^2 θp μ1 μ2 Φ1 +
θp Φ2 + 6 η θp Φ2 + 6 η^2 θp Φ2 - 10 θp μ1 Φ2 - 58 η θp μ1 Φ2 -
51 η^2 θp μ1 Φ2 + 16 η^3 θp μ1 Φ2 + 10 η^4 θp μ1 Φ2 -
11 θp μ1^2 Φ2 - 100 η θp μ1^2 Φ2 - 201 η^2 θp μ1^2 Φ2 -
104 η^3 θp μ1^2 Φ2 + 10 η^4 θp μ1^2 Φ2 + 7 θp μ2 Φ2 + 6 η θp μ2 Φ2 -
102 η^2 θp μ2 Φ2 - 120 η^3 θp μ2 Φ2 - 17 θp μ1 μ2 Φ2 -
66 η θp μ1 μ2 Φ2 + 42 η^2 θp μ1 μ2 Φ2 + 120 η^3 θp μ1 μ2 Φ2 -
w^3 (-1 + η)^3 (-8 - 49 μ2 - θp Φ1 + 5 θp μ2 Φ1 + 8 μ1^2 (20 + 3 θp (Φ1 - Φ2)) +
    μ1 (80 + μ2 (-1 + 5 θp (Φ1 - Φ2)) + 11 θp (Φ1 - Φ2)) +
    θp Φ2 - 5 θp μ2 Φ2 + 3 η^2 (-4 - 2 θp Φ1 +
        μ2 (-19 + 10 θp (Φ1 - Φ2)) + 4 μ1^2 (31 + 12 θp (Φ1 - Φ2)) +
        μ1 (32 + μ2 (29 + 10 θp (Φ1 - Φ2)) + 22 θp (Φ1 - Φ2)) +
        2 θp Φ2) + 2 η (-12 - 53 μ2 - 3 θp Φ1 + 15 θp μ2 Φ1 +
        μ1 (86 + μ2 (43 + 15 θp (Φ1 - Φ2)) + 33 θp (Φ1 - Φ2)) +
        μ1^2 (326 + 72 θp (Φ1 - Φ2)) + 3 θp Φ2 - 15 θp μ2 Φ2)) +
w^2 (-1 + η)^2 (3 × (-4 + 68 μ1^2 - 29 μ2 + μ1 (40 + 19 μ2)) +
    θp (-2 - 3 Φ1 + μ1^2 (-48 + 59 Φ1 - 59 Φ2) +
        μ1 (-26 + 32 Φ1 + μ2 (-62 + 15 Φ1 - 27 Φ2) - 32 Φ2) +
        μ2 (34 + 15 Φ1 - 3 Φ2) + 3 Φ2) + 3 η (-16 + 356 μ1^2 - 86 μ2 +
        2 μ1 (78 + 53 μ2) + θp μ1^2 (-44 + 133 Φ1 - 129 Φ2) +
        θp μ1 (-26 + 67 Φ1 + 6 μ2 (-15 + 5 Φ1 - 7 Φ2) - 63 Φ2) +
        6 θp (-1 - Φ1 + μ2 (9 + 5 Φ1 - 3 Φ2) + Φ2)) +
    3 η^2 (-12 + 96 μ1 + 372 μ1^2 - 57 μ2 + 87 μ1 μ2 + 2 θp
            (μ1^2 (56 + 89 Φ1 - 81 Φ2) + μ1 (26 + 38 Φ1 + 3 μ2 (2 + 5 Φ1 - Φ2) -
                30 Φ2) + 3 × (-2 - Φ1 + μ2 (2 + 5 Φ1 - 9 Φ2) + Φ2)) + 2 η^3
      (8 μ1 (-1 + 11 μ1) + 5 θp (μ1^2 (52 + 15 Φ1 - 11 Φ2) - 2 × (1 + 7
                μ2 + 6 μ2 Φ2) + μ1 (26 + 34 μ2 + 3 Φ1 + Φ2 + 12 μ2 Φ2)))) -
w (-1 + η) × (-8 + 80 μ1 + 112 μ1^2 - 67 μ2 + 77 μ1 μ2 + θp
      (4 - 3 Φ1 + μ1^2 (-70 + 46 Φ1 - 46 Φ2) + μ1 (-42 + 31 Φ1 + 3 μ2 (-32 +
                5 Φ1 - 13 Φ2) - 31 Φ2) + 3 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2)) +
    2 η^4 (-50 θp μ2 + μ1^2 (-8 + 5 θp (41 + Φ1 + Φ2)) + μ1
            (-8 + 5 θp (5 + 14 μ2 + Φ1 + Φ2))) + 2 η^3 (16 μ1 (-1 + 11 μ1) +
        θp (μ1^2 (526 + 153 Φ1 - 107 Φ2) - 10 × (6 + 7 μ2 + 12 μ2 Φ2) +
            μ1 (226 + 242 μ2 + 33 Φ1 + 13 Φ2 + 120 μ2 Φ2))) +
    η^2 (-36 + 296 μ1 + 1124 μ1^2 - 171 μ2 + 261 μ1 μ2 + 3 θp (-40 -
            6 Φ1 + μ1^2 (118 + 211 Φ1 - 181 Φ2) + μ2 (74 + 30 Φ1 - 78 Φ2) +
            6 Φ2 + μ1 (78 + 85 Φ1 - 55 Φ2 + 2 μ2 (-23 + 15 Φ1 + 9 Φ2)))) +
    η (-40 + 692 μ1^2 - 238 μ2 + μ1 (436 + 338 μ2) + θp
        (μ1 (-134 + 203 Φ1 + 2 μ2 (-235 + 45 Φ1 - 81 Φ2) - 181 Φ2) +
            2 × (-6 - 9 Φ1 + μ2 (137 + 45 Φ1 - 9 Φ2) + 9 Φ2) +
            μ1^2 (365 Φ1 - 7 × (38 + 49 Φ2)))))) +
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x^5 (-1 + η)^5 (4 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 (1 + η - 11 μ1 +
      η μ1 + w (-1 + η) × (-1 + 11 μ1)) +
    θp (-10 - 6 η + 40 η^2 - 24 η^3 - 8 ηt - 16 η ηt + 24 η^2 ηt + 10 θl +
      24 η θl - 10 ηt θl - 24 η ηt θl + 32 μ1 + 12 η μ1 - 20 η^2 μ1 -
      24 η^3 μ1 - 8 ηt μ1 - 16 η ηt μ1 + 24 η^2 ηt μ1 - 18 θl μ1 +
      10 η θl μ1 + 18 ηt θl μ1 - 10 η ηt θl μ1 + 90 μ1^2 + 114 η μ1^2 -
      204 η^2 μ1^2 - 52 θl μ1^2 - 158 η θl μ1^2 + 52 ηt θl μ1^2 +
      158 η ηt θl μ1^2 + 4 w^3 (-1 + η)^4 (1 + μ1) (η - ηt + 4 μ1) +
      6 μ2 - 30 η μ2 + 24 η^2 μ2 + 12 ηt μ2 - 12 η ηt μ2 - 6 θl μ2 +
      10 η θl μ2 + 6 ηt θl μ2 - 10 η ηt θl μ2 + 30 μ1 μ2 - 6 η μ1 μ2 -
      24 η^2 μ1 μ2 - 12 ηt μ1 μ2 + 12 η ηt μ1 μ2 - 6 θl μ1 μ2 -
      14 η θl μ1 μ2 + 6 ηt θl μ1 μ2 + 14 η ηt θl μ1 μ2 - 3 θl μ1 Φ1 -
      η θl μ1 Φ1 + 3 ηt θl μ1 Φ1 + η ηt θl μ1 Φ1 - 15 θl μ1^2 Φ1 -
      η θl μ1^2 Φ1 + 15 ηt θl μ1^2 Φ1 + η ηt θl μ1^2 Φ1 - θl μ1 Φ2 -
      η θl μ1 Φ2 + ηt θl μ1 Φ2 + η ηt θl μ1 Φ2 + 11 θl μ1^2 Φ2 -
      η θl μ1^2 Φ2 - 11 ηt θl μ1^2 Φ2 + η ηt θl μ1^2 Φ2 + 12 θl μ2 Φ2 -
      12 ηt θl μ2 Φ2 - 12 θl μ1 μ2 Φ2 + 12 ηt θl μ1 μ2 Φ2 -
      w^2 (-1 + η)^2 (2 - 2 θl - 72 μ1 + 26 θl μ1 - 122 μ1^2 + 52 θl μ1^2 +
        12 η^3 (1 + μ1) + 14 μ2 - 14 θl μ2 - 58 μ1 μ2 + 34 θl μ1 μ2 +
        4 η^2 (1 + 13 μ1 + 12 μ1^2 - 3 ηt (1 + μ1) - 3 μ2 + 3 μ1 μ2) +
        4 ηt (4 - 3 μ2 + μ1 (4 + 3 μ2)) - 2 η (9 - 4 μ1 - 37 μ1^2 + μ2 - 23 μ1 μ2 +
          2 ηt (1 + μ1 - 3 μ2 + 3 μ1 μ2)) + 3 θl μ1 Φ1 + 15 θl μ1^2 Φ1 +
        θl μ1 Φ2 - 11 θl μ1^2 Φ2 - 12 θl μ2 Φ2 + 12 θl μ1 μ2 Φ2 -
        ηt θl (μ1^2 (52 + 15 Φ1 - 11 Φ2) - 2 × (1 + 7 μ2 + 6 μ2 Φ2) +
          μ1 (26 + 34 μ2 + 3 Φ1 + Φ2 + 12 μ2 Φ2)) + w (-1 + η) ×
       (36 η^3 (1 + μ1) - 4 η^2 (4 - 63 μ1^2 + 9 ηt (1 + μ1) + 9 μ2 - μ1 (23 + 9 μ2)) +
        η (-32 + 28 μ2 - 10 θl μ2 + μ1^2 (-56 + θl (158 + Φ1 + Φ2)) +
          μ1 (-40 + 52 μ2 + θl (14 + 14 μ2 + Φ1 + Φ2)) -
          ηt (-16 - 2 × (12 + 5 θl) μ2 + 8 μ1 (-2 + 3 μ2) +
            θl μ1^2 (158 + Φ1 + Φ2) + θl μ1 (14 + 14 μ2 + Φ1 + Φ2)) -
        2 × (-6 + 44 μ1 + 98 μ1^2 - 4 μ2 + 44 μ1 μ2 - θl
            (μ1^2 (52 + 15 Φ1 - 11 Φ2) + μ1 (22 + 3 Φ1 + Φ2 + 4 μ2 (5 + 3 Φ2)) -
              2 × (3 + μ2 (2 + 6 Φ2))) + ηt (-2 × (5 - 6 μ2 + μ1 (5 + 6 μ2)) +
              θl (μ1^2 (52 + 15 Φ1 - 11 Φ2) + μ1 (22 + 3 Φ1 + Φ2 +
                  4 μ2 (5 + 3 Φ2)) - 2 × (3 + μ2 (2 + 6 Φ2)))))))) -
x (-1 + η) × (4 w^2 (3 - 5 w + 2 w^2) η^9 θp (1 + μ1) - 4 w η^8 θp (9 × (1 + μ1) +
      w (-11 - 23 μ1 - 12 μ1^2 + 3 ηt (1 + μ1) + 15 μ2 - 15 μ1 μ2) +
      w^3 (7 - μ1 - 8 μ1^2 + 2 ηt (1 + μ1) + 9 μ2 - 9 μ1 μ2) +
      w^2 (-6 + 14 μ1 + 20 μ1^2 - 5 ηt (1 + μ1) - 24 μ2 + 24 μ1 μ2)) +
    (1 + w)^3 (-5 w θl (1 + μ1) μ2 + 5 w ηt θl (1 + μ1) μ2 +
      ηt θp (-2 + 22 μ1^2 + 2 w (-1 + 29 μ1^2 + μ1 (4 - 5 μ2) - 5 μ2) -
        19 μ2 + μ1 (20 + 29 μ2)) - 2 η^7 θp (-12 × (1 + μ1) +
      2 w (7 + 34 μ1 + 63 μ1^2 - 9 ηt (1 + μ1) - 45 μ2 + 45 μ1 μ2) + 2 w^3
       (-18 - 4 μ1 + 38 μ1^2 + 23 μ2 + 65 μ1 μ2 + 6 ηt (1 + μ1 + 4 μ2 - 4 μ1 μ2)) +
```

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w^4 (-9 + 14 μ1 + 23 μ1^2 - 57 μ2 - 9 μ1 μ2 + 2 ηt
      (-7 - 7 μ1 - 9 μ2 + 9 μ1 μ2)) + w^2 (47 - 66 μ1 - 233 μ1^2 +
     113 μ2 - 223 μ1 μ2 + ηt (22 + 22 μ1 - 30 μ2 + 30 μ1 μ2))) -
η (θp (8 w (1 + μ1) × (-1 + 11 μ1 + 3 μ2) - 4 w ηt (-6 + 49 μ1 +
          133 μ1^2 - 36 μ2 + 60 μ1 μ2) + ηt (10 - 150 μ1^2 + 57 μ2 -
          μ1 (92 + 87 μ2)) + 2 w^4 (-2 + 28 μ1 + 30 μ1^2 + 10 μ2 +
          34 μ1 μ2 + ηt (-5 + 28 μ1 + 69 μ1^2 - 8 μ2 - 32 μ1 μ2)) +
     w^2 (ηt (4 - 64 μ1 - 476 μ1^2 + 101 μ2 - 283 μ1 μ2) +
          4 × (-7 + 53 μ1 + 72 μ1^2 + 7 μ2 + 43 μ1 μ2)) +
     2 w^3 (ηt (-10 + 48 μ1 + 22 μ1^2 - μ2 - 97 μ1 μ2) +
          2 × (-4 + 49 μ1 + 65 μ1^2 + 6 μ2 + 54 μ1 μ2))) +
   (-1 + ηt) θl (-2 + 20 μ1 + 22 μ1^2 - 19 μ2 + 29 μ1 μ2 + 2 w^4 (1 + μ1) ×
      (-1 + 17 μ1 + 5 μ2) + 2 w^3 (-4 - θp Φ1 + μ2 (-2 + 5 θp (Φ1 - Φ2)) +
          μ1 (58 + μ2 (22 + 5 θp (Φ1 - Φ2)) + 11 θp (Φ1 - Φ2)) +
          μ1^2 (62 + 24 θp (Φ1 - Φ2)) + θp Φ2) +
     w^2 (3 × (-4 + 56 μ1^2 - 19 μ2 + μ1 (52 + 29 μ2)) +
          2 θp (-2 - 3 Φ1 + μ1^2 (-48 + 59 Φ1 - 59 Φ2) +
              μ1 (-26 + 32 Φ1 + μ2 (-62 + 15 Φ1 - 27 Φ2) - 32 Φ2) +
              μ2 (34 + 15 Φ1 - 3 Φ2) + 3 Φ2)) + 2 θp
      (2 - Φ1 + 11 μ1^2 (-2 + Φ1 - Φ2) + Φ2 + μ2 (14 + 5 Φ1 + 7 Φ2) +
          μ1 (5 μ2 Φ1 + 10 × (-2 + Φ1 - Φ2) - 17 μ2 (2 + Φ2))) +
     2 w (-4 + 46 μ1 + 50 μ1^2 - 31 μ2 + 41 μ1 μ2 + θp (4 - 3 Φ1 + μ1^2
              (-70 + 46 Φ1 - 46 Φ2) + μ1 (-42 + 31 Φ1 + 3 μ2 (-32 + 5 Φ1 -
                  13 Φ2) - 31 Φ2) + 3 Φ2 + 3 μ2 (16 + 5 Φ1 + 3 Φ2))))) +
η^3 (θp (-ηt (-28 + 72 μ1 + 244 μ1^2 + 11 μ2 + 11 μ1 μ2) - 4 × (-7 +
          36 μ1 + 67 μ1^2 - 17 μ2 + 79 μ1 μ2) + 4 w^3 (-8 + 132 μ1 + 188 μ1^2 -
          203 μ2 + 427 μ1 μ2 + ηt (-32 - 6 μ1 + 518 μ1^2 - 5 μ2 - 5 μ1 μ2)) +
     2 w^4 (9 - 22 μ1 - 31 μ1^2 - 247 μ2 + 137 μ1 μ2 + 2 ηt
          (-8 - 73 μ1 + 235 μ1^2 - 15 μ2 + 15 μ1 μ2)) -
     4 w (2 × (4 - 15 μ1 + 5 μ1^2 - 59 μ2 + 61 μ1 μ2) + ηt
          (-18 - μ1 + 323 μ1^2 - 54 μ2 + 90 μ1 μ2)) -
     2 w^2 (75 - 418 μ1 - 613 μ1^2 - 7 μ2 - 667 μ1 μ2 + ηt
          (30 - 170 μ1 + 28 μ1^2 - 137 μ2 + 211 μ1 μ2))) +
   (-1 + ηt) θl (4 - 44 μ1 - 120 μ1^2 + 19 μ2 - 29 μ1 μ2 + 4 w^4
      (1 + 7 μ1^2 + 5 μ1 (-8 + μ2) + 5 μ2) + 8 w^3 (-1 - θp Φ1 +
          μ2 (-1 + 5 θp (Φ1 - Φ2)) + μ1 (-5 + μ2 (11 + 5 θp (Φ1 - Φ2)) +
              11 θp (Φ1 - Φ2)) + μ1^2 (50 + 24 θp (Φ1 - Φ2)) + θp Φ2) +
     2 w^2 (3 × (-4 + 74 μ1^2 - 19 μ2 + μ1 (50 + 29 μ2)) + θp (-4 - 9 Φ1 +
              μ1 (-104 + 93 Φ1 + μ2 (-220 + 45 Φ1 - 93 Φ2) - 97 Φ2) + 2 μ1^2
               (-98 + 81 Φ1 - 83 Φ2) + 9 Φ2 + μ2 (116 + 45 Φ1 + 3 Φ2))) -
     θp (μ1^2 (10 + 161 Φ1 - 135 Φ2) + 2 μ2 (67 + 10 Φ1 - 34 Φ2) -
          4 × (6 + Φ1 - Φ2) + μ1 (82 + 61 Φ1 -
              35 Φ2 + 2 μ2 (-65 + 10 Φ1 + 14 Φ2))) +
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        w (-8 - 48 μ1^2 - 62 μ2 + 2 μ1 (68 + 41 μ2) + θp (68 - 6 Φ1 +
              μ1 (-290 + 33 Φ1 + 6 μ2 (-63 + 5 Φ1 - 33 Φ2) - 71 Φ2) + 6 Φ2 +
              μ1^2 (-502 - 57 Φ1 + 19 Φ2) + 6 μ2 (21 + 5 Φ1 + 23 Φ2)))) +
η^2 (-θp (-12 - 4 × (-33 + 58 ηt) μ1^2 + 76 μ2 + 41 ηt μ2 + μ1
          (120 + 56 ηt - 20 μ2 - 55 ηt μ2) +
        4 w (-14 + 89 μ1 + 139 μ1^2 + 10 μ2 + 94 μ1 μ2) + 6 w ηt
          (-10 + 40 μ1^2 - 11 μ2 + 7 μ1 (10 + 3 μ2)) + 2 w^4 (9 - 84 μ1 - 93 μ1^2 -
            83 μ2 - 71 μ1 μ2 + ηt (4 - 86 μ1 + 90 μ1^2 - 17 μ2 + 67 μ1 μ2)) +
        2 w^2 (1 + 88 μ1 + 159 μ1^2 - 123 μ2 + 321 μ1 μ2 + 3 ηt
              (-18 + 82 μ1 + 280 μ1^2 - 49 μ2 + 83 μ1 μ2)) +
        w^3 (-8 × (-5 + 32 μ1 + 43 μ1^2 + 42 μ2 - 6 μ1 μ2) + ηt
              (-36 - 40 μ1 + 1388 μ1^2 - 221 μ2 + 451 μ1 μ2))) + (-1 + ηt) θl
      (6 - 80 μ1 - 62 μ1^2 + w^3 (-12 + 76 μ1^2 - μ1 (-232 + μ2) - 49 μ2) +
        w^4 (-6 + 78 μ1^2 - 5 μ1 (-24 + μ2) - 5 μ2) + 38 μ2 -
        58 μ1 μ2 - 4 w (-3 + 42 μ1 + 51 μ1^2 - 13 μ2 + 23 μ1 μ2 +
            θp (-5 - 3 Φ1 + μ1^2 (-32 + 68 Φ1 - 63 Φ2) +
                μ1 (-13 + 35 Φ1 + μ2 (-73 + 15 Φ1 - 21 Φ2) - 30 Φ2) +
                μ2 (47 + 15 Φ1 - 9 Φ2) + 3 Φ2)) - w^2 (6 × (24 μ1^2 + 5 μ2 +
                μ1 (-4 + 5 μ2)) + θp (-10 - 6 Φ1 + μ1^2 (60 + 163 Φ1 - 151 Φ2) +
                μ1 (26 + 73 Φ1 + 2 μ2 (-11 + 15 Φ1 - 9 Φ2) - 61 Φ2) +
                μ2 (26 + 30 Φ1 - 42 Φ2) + 6 Φ2)) + θp (μ1^2 (136 - 109 Φ1 +
                101 Φ2) - 2 × (3 - 3 Φ1 + 3 Φ2 + μ2 (61 + 15 Φ1 + 3 Φ2)) +
            μ1 (58 - 67 Φ1 + 59 Φ2 + μ2 (214 - 30 Φ1 + 66 Φ2))))) +
η^5 (4 × (-1 + ηt) θl μ1 (1 + μ1) + 2 w^4 ((-1 + ηt) θl (-3 + 99 μ1^2 -
            5 μ2 - 5 μ1 μ2) + 20 θp (-2 + 11 μ1 + 13 μ1^2 - 10 μ2 + 32 μ1 μ2) +
        ηt θp (-19 + 351 μ1^2 + 100 μ2 - 4 μ1 (16 + 35 μ2))) +
    θp (-50 + 100 μ1 + 246 μ1^2 + 4 ηt (-1 + μ1) × (4 + 4 μ1 - 15 μ2) -
        26 μ2 + 238 μ1 μ2 + θl (-24 - 50 μ2 + μ1^2 (166 + 5 Φ1 + 5 Φ2) +
            μ1 (-2 + 70 μ2 + 5 Φ1 + 5 Φ2)) - ηt θl (-24 - 50 μ2 +
            μ1^2 (166 + 5 Φ1 + 5 Φ2) + μ1 (-2 + 70 μ2 + 5 Φ1 + 5 Φ2)) -
    2 w^3 (2 × (-1 + ηt) θl (μ1 + 13 μ1^2 - μ2 + 11 μ1 μ2) +
        θp (34 - 192 μ2 + 3 θl Φ1 - 15 θl μ2 Φ1 + μ1^2 (-6 - 72 θl (Φ1 - Φ2)) +
            μ1 (4 - 3 μ2 (-8 + 5 θl (Φ1 - Φ2)) - 33 θl (Φ1 - Φ2)) - 3 θl Φ2 +
            15 θl μ2 Φ2 + ηt (-50 - 3 θl Φ1 + μ2 (-137 + 15 θl (Φ1 - Φ2)) +
                μ1 (24 + μ2 (247 + 15 θl (Φ1 - Φ2)) + 33 θl (Φ1 - Φ2)) +
                μ1^2 (422 + 72 θl (Φ1 - Φ2)) + 3 θl Φ2))) -
    w^2 (3 θp (-68 + 468 μ1^2 - 144 μ2 + 8 μ1 (32 + 79 μ2) + ηt
              (-36 + 236 μ1^2 + μ1 (56 - 61 μ2) + 83 μ2)) +
        (-1 + ηt) θl (-12 + 128 μ1 + 260 μ1^2 - 57 μ2 + 87 μ1 μ2 +
            2 θp (-2 - 6 Φ1 + μ1^2 (-148 + 103 Φ1 - 107 Φ2) +
                μ1 (-78 + 61 Φ1 + 2 μ2 (-79 + 15 Φ1 - 33 Φ2) - 65 Φ2) +
                6 Φ2 + μ2 (82 + 30 Φ1 + 6 Φ2)))) +
    w (4 × (-1 + ηt) θl μ1 (-1 + 23 μ1) + θp (60 + 292 μ1^2 - 412 μ2 +
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\begin{aligned}
&4\,\mu1\,(4+71\,\mu2)+4\,\eta t\,\left(-19+88\,\mu1^2-28\,\mu2+\mu1\,(-27+44\,\mu2)\right)-\\
&\theta l\,\mu1^2\,(362+149\,\Phi1-111\,\Phi2)+30\,\theta l\,(2+\mu2+4\,\mu2\,\Phi2)-\\
&\theta l\,\mu1\,(206+29\,\Phi1+9\,\Phi2+6\,\mu2\,(31+20\,\Phi2))+\\
&\eta t\,\theta l\,\left(\mu1^2\,(362+149\,\Phi1-111\,\Phi2)-30\times(2+\mu2+4\,\mu2\,\Phi2)+\right.\\
&\quad\left.\mu1\,(206+29\,\Phi1+9\,\Phi2+6\,\mu2\,(31+20\,\Phi2))\right)\Big)\Big)\Big)-\\
&\eta^6\,\Big(4\,\theta p\,\left(2-51\,\mu1^2+6\,\eta t\,(1+\mu1)+30\,\mu2-\mu1\,(13+30\,\mu2)\right)+\\
&\quad w^4\,\Big((-1+\eta t)\,\theta l\,\left(-2+58\,\mu1^2+\mu1\,(8-5\,\mu2)-5\,\mu2\right)+\\
&\quad 2\,\theta p\,\left(-23+72\,\mu1+95\,\mu1^2+5\,\mu2+281\,\mu1\,\mu2+\right.\\
&\quad\left.\eta t\,\left(10+2\,\mu1+76\,\mu1^2+73\,\mu2-83\,\mu1\,\mu2\right)\right)\Big)+\\
&\quad w^3\,\Big(\theta p\,\left(-8\times\left(-13+89\,\mu1^2-44\,\mu2+2\,\mu1\,(23+68\,\mu2)\right)+\right.\\
&\quad\left.\eta t\,\left(68-396\,\mu1^2-123\,\mu2+\mu1\,(8+69\,\mu2)\right)\right)-\\
&\quad(-1+\eta t)\,\theta l\,\left(-4-4\,\theta p\,\Phi1+\mu2\,(-19+20\,\theta p\,(\Phi1-\Phi2))+\right.\\
&\quad 4\,\mu1^2\,(29+24\,\theta p\,(\Phi1-\Phi2))+\\
&\quad\left.\mu1\,(40+\mu2\,(29+20\,\theta p\,(\Phi1-\Phi2))+44\,\theta p\,(\Phi1-\Phi2))+4\,\theta p\,\Phi2\right)\Big)+\\
&\quad w\,\Big(4\times(-1+\eta t)\,\theta l\,\mu1\,(1+\mu1)+\theta p\,\left(-2\times(68+(48+25\,\theta l)\,\mu2)+\right.\\
&\quad\mu1^2\,(476+\theta l\,(166+5\,\Phi1+5\,\Phi2))+\\
&\quad\mu1\,(148+528\,\mu2+\theta l\,(22+70\,\mu2+5\,\Phi1+5\,\Phi2))-\\
&\quad\eta t\,\left(28-10\times(12+5\,\theta l)\,\mu2+\mu1^2\,(-16+\theta l\,(166+5\,\Phi1+5\,\Phi2))+\right.\\
&\quad\left.\left.\mu1\,(12+120\,\mu2+\theta l\,(22+70\,\mu2+5\,\Phi1+5\,\Phi2))\right)\right)\Big)+\\
&\quad w^2\,\Big(4\times(-1+\eta t)\,\theta l\,\mu1\,(-1+11\,\mu1)+\theta p\,\left(2\times\left(57+115\,\mu1^2-\right.\right.\\
&\quad\left.227\,\mu2+\mu1\,(52+37\,\mu2)\right)-5\,\theta l\,\left(\mu1^2\,(52+15\,\Phi1-11\,\Phi2)-2\times\right.\\
&\quad\left.(1+7\,\mu2+6\,\mu2\,\Phi2)+\mu1\,(26+34\,\mu2+3\,\Phi1+\Phi2+12\,\mu2\,\Phi2)\right)+\\
&\quad\eta t\,\left(4\times\left(40\,\mu1^2-7\times(3+5\,\mu2)+\mu1\,(-29+43\,\mu2)\right)+\right.\\
&\quad 5\,\theta l\,\left(\mu1^2\,(52+15\,\Phi1-11\,\Phi2)-2\times(1+7\,\mu2+6\,\mu2\,\Phi2)+\right.\\
&\quad\left.\left.\mu1\,(26+34\,\mu2+3\,\Phi1+\Phi2+12\,\mu2\,\Phi2)\right)\right)\Big)\Big)+\\
&\eta^4\,\Big(-4\times(-1+\eta t)\,\theta l\,\mu1\,(-1+11\,\mu1)+w^4\,\Big(-\Big((-1+\eta t)\,\theta l\,\\
&\quad\left(-4+212\,\mu1^2+5\,\mu1\,(-16+\mu2)+5\,\mu2\right)\Big)+\\
&\quad 2\,\theta p\,\left(-5\,\eta t\,\left(-7-28\,\mu1+123\,\mu1^2+7\,\mu2-17\,\mu1\,\mu2\right)-\right.\\
&\quad\left.2\times\left(-8+87\,\mu1+95\,\mu1^2-170\,\mu2+280\,\mu1\,\mu2\right)\right)\Big)+\\
&\quad w^3\,\Big(\theta p\,\left(-8\times\left(-19+166\,\mu1^2-58\,\mu2+\mu1\,(111+266\,\mu2)\right)+\right.\\
&\quad\left.\eta t\,\left(52-388\,\mu1^2-455\,\mu2+\mu1\,(96+745\,\mu2)\right)\right)-\\
&\quad(-1+\eta t)\,\theta l\,\left(-16-53\,\mu2-4\,\theta p\,\Phi1+20\,\theta p\,\mu2\,\Phi1+32\,\mu1^2\right.\\
&\quad\left.(13+3\,\theta p\,(\Phi1-\Phi2))+\mu1\,(112+\mu2\,(43+20\,\theta p\,(\Phi1-\Phi2))+\right.\\
&\quad\left.44\,\theta p\,(\Phi1-\Phi2))+4\,\theta p\,\Phi2-20\,\theta p\,\mu2\,\Phi2\right)\Big)+\\
&\quad w\,\Big(\theta p\,\left(\eta t\,\left(-88+540\,\mu1^2+\mu1\,(212-127\,\mu2)+161\,\mu2\right)+\right.\\
&\quad\left.4\times\left(-41+280\,\mu1^2-68\,\mu2+\mu1\,(155+328\,\mu2)\right)\right)+\\
&\quad(-1+\eta t)\,\theta l\,\left(3\times\left(-4+88\,\mu1^2-19\,\mu2+\mu1\,(44+29\,\mu2)\right)+\right.\\
&\quad\theta p\,\left(\mu1^2\,(-294+267\,\Phi1-257\,\Phi2)+\right.\\
&\quad\mu1\,(-74+135\,\Phi1+\mu2\,(-362+60\,\Phi1-84\,\Phi2)-125\,\Phi2)+\\
&\quad\left.\left.2\times(-10-6\,\Phi1+\mu2\,(119+30\,\Phi1-18\,\Phi2)+6\,\Phi2)\right)\right)\Big)+\\
&\quad\theta p\,\Big(-6+88\,\mu1-50\,\mu1^2+154\,\mu2-62\,\mu1\,\mu2+\theta l\,\Big(\mu1^2\,(268+\\
&\quad 79\,\Phi1-51\,\Phi2)-10\times(5+\mu2+6\,\mu2\,\Phi2)+\\
&\quad\mu1\,(98+86\,\mu2+19\,\Phi1+9\,\Phi2+60\,\mu2\,\Phi2)\Big)-
\end{aligned}
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                    ηt (4 × (-6 + 44 μ1^2 - 17 μ2 + 5 μ1 (-2 + 5 μ2)) +
                        θl (μ1^2 (268 + 79 Φ1 - 51 Φ2) - 10 × (5 + μ2 + 6 μ2 Φ2) +
                            μ1 (98 + 86 μ2 + 19 Φ1 + 9 Φ2 + 60 μ2 Φ2))) +
                w^2 ((-1 + ηt) θl (172 μ1^2 + 15 μ2 + μ1 (-44 + 15 μ2)) +
                    θp (72 + 500 μ1^2 - 832 μ2 + 4 μ1 (47 + 236 μ2) - 2 θl (-10 - 3 Φ1 +
                            μ1^2 (160 + 119 Φ1 - 103 Φ2) + μ2 (-22 + 15 Φ1 - 51 Φ2) +
                            3 Φ2 + μ1 (78 + 44 Φ1 - 28 Φ2 + μ2 (74 + 15 Φ1 + 21 Φ2))) +
                        ηt (-168 + 112 μ1 + 1888 μ1^2 - 331 μ2 + 629 μ1 μ2 +
                            2 θl (-10 - 3 Φ1 + μ1^2 (160 + 119 Φ1 - 103 Φ2) +
                                μ2 (-22 + 15 Φ1 - 51 Φ2) + 3 Φ2 + μ1 (78 + 44 Φ1 -
                                    28 Φ2 + μ2 (74 + 15 Φ1 + 21 Φ2))))))))))) /
    (96 (-1 + w (-1 + η))^3 (w (-1 + η) + x (-1 + η) - η)^2 (x + η - x η)^2
      (1 +
         x +
         η -
         x
          η)^2 (-1 + ηt) θl θp Φ2))
δγψ = -((cv (x (-1 + η) - η) (1 + x + η - x η)^2
      (40 u (-1 + w (-1 + η))^3 (x + η - x η)^2 (w + x + η - w η - x η)^3 (-1 + ηt) θp -
        f (-1 + η) × (-2 w^5 (-1 + η)^5 (η θp (7 η^3 - ηt - η^2 (13 + 7 ηt) +
                η (6 + 8 ηt + θl (-2 + Φ1 + Φ2) - ηt θl (-2 + Φ1 + Φ2))) - 2 x
              (-1 + η) × (7 η^3 θp + ηt θp + 6 η (1 + ηt) θp - η^2 (13 + 7 ηt) θp -
                η (-1 + ηt) θl (-2 + θp (-2 + Φ1 + Φ2))) + x^2 (-1 + η)^2
              ((-1 + η) × (-6 + 7 η - 7 ηt) θp - (-1 + ηt) θl (-1 + θp (-2 + Φ1 + Φ2)))) -
          2 (x + η - x η)^3 (2 x^2 (-1 + η)^2 (-3 + 3 η + θl - ηt θl) θp + θp
              (6 η^3 - ηt - 2 η^2 (3 + (-1 + ηt) θl) +
                η (ηt + θl (2 + Φ1 + Φ2) - ηt θl (2 + Φ1 + Φ2))) + x (-1 + η) ×
              (-12 × (-1 + η) η θp + (-1 + ηt) θl (-1 + θp (2 + 4 η + Φ1 + Φ2)))) +
          w (x (-1 + η) - η) (-1 + η) × (2 x^4 (-1 + η)^4 θp (30 + 21 η^2 - 22 θl -
                η (51 - 14 θl + 7 ηt (1 + 2 θl)) + θl Φ1 + ηt (7 + 22 θl - θl Φ1)) - 2
              x^3 (-1 + η)^3 (2 × (-1 + η) × (-9 + 42 η^2 - 2 η (30 + 7 ηt)) θp -
                (-1 + ηt) θl (3 + θp (56 η^2 + 4 η (-22 + Φ1) - 3 × (4 + Φ1 + Φ2)))) + η
              θp (42 η^5 + 6 ηt - 2 η^4 (51 - 14 θl + 7 ηt (1 + 2 θl)) +
                η^3 (24 + ηt (14 - 2 θl (-22 + Φ1)) + 2 θl (-22 + Φ1)) +
                η (-1 + ηt) θl (10 + 5 Φ1 + 3 Φ2) +
                6 η^2 (6 - θl (4 + Φ1 + Φ2) + ηt (-1 + θl (4 + Φ1 + Φ2)))) + x^2
              (-1 + η)^2 (6 × (-1 + η) × (-18 η + 42 η^3 - ηt - 2 η^2 (30 + 7 ηt)) θp -
                (-1 + ηt) θl (18 + 168 η^3 θp + 12 η^2 θp (-22 + Φ1) - θp
                    (22 + 11 Φ1 + 9 Φ2) - 6 η (-2 + 3 θp (4 + Φ1 + Φ2)))) - 2 x (-1 + η) ×
              (84 η^5 θp + 12 ηt θp - 4 η^4 (51 - 14 θl + 7 ηt (1 + 2 θl)) θp +
                2 η^3 θp (33 + ηt (14 - 2 θl (-22 + Φ1)) + 2 θl (-22 + Φ1)) +
                3 η^2 (-2 × (-9 + ηt) θp + (-1 + ηt) θl (-1 + 3 θp (4 + Φ1 + Φ2))) +
                2 η θp (-θl (8 + 4 Φ1 + 3 Φ2) + ηt (-3 + θl (8 + 4 Φ1 + 3 Φ2)))) -
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$$
\begin{aligned}
& w^3 (-1+\eta)^3 \Big(2 x^4 (-1+\eta)^4 (3 \times (-1+\eta) \times (-6+7\eta-7\eta t)\, \theta p - \\
& \quad (-1+\eta t)\, \theta l\, (1+\theta p\, (-8+2\Phi 1-\Phi 2))) + x^3 (-1+\eta)^3 \\
& \quad \big(-2 \times (-1+\eta) \times \big(-90+84\eta^2-22\eta t-3\eta\,(3+28\eta t)\big)\, \theta p + (-1+\eta t) \\
& \quad \theta l\, (54+6\eta+4\eta\, \theta p\, (5+4\Phi 1-2\Phi 2) - 9\, \theta p\, (22+3\Phi 1+3\Phi 2))\big) + \eta \\
& \quad \theta p \big(42\eta^5 - 6\eta t - 6\eta^4 (-8+7\eta t) - 2\eta^3 (135+\eta t + \\
& \quad \eta t\, \theta l\, (34+2\Phi 1-\Phi 2) + \theta l\, (-34-2\Phi 1+\Phi 2)) + \\
& \quad \eta\, (12+\eta t\, (24+\theta l\, (4-6\Phi 2)) + \theta l\, (-4+6\Phi 2)) + \\
& \quad \eta^2 (168 - 9\, \theta l\, (18+\Phi 1+\Phi 2) + \eta t\, (26+9\, \theta l\, (18+\Phi 1+\Phi 2)))\big) - x \\
& \quad (-1+\eta) \times \big(168\eta^5\, \theta p + 6\eta^4 (11-28\eta t)\, \theta p + 12\eta t\, \theta p - \\
& \quad 2\eta^3 (9 \times (43-2\eta t)\, \theta p + (-1+\eta t)\, \theta l\, (1+\theta p\, (94+8\Phi 1-4\Phi 2))) + \\
& \quad \eta\, (6 \times (4+13\eta t)\, \theta p - 4 \times (-1+\eta t)\, \theta l\, (-6+\theta p\, (-2+3\Phi 2))) + 3\eta^2\, \theta p \\
& \quad (172 - 3\, \theta l\, (58+5\Phi 1+5\Phi 2) + \eta t\, (14+3\, \theta l\, (58+5\Phi 1+5\Phi 2)))\big) + x^2 \\
& \quad (-1+\eta)^2 \big(6 \times (-1+\eta) \times \big(42\eta^3+\eta^2 (27-42\eta t) - 2 \times (1+6\eta t) - 2\eta\, (45+ \\
& \quad 11\eta t)\big)\, \theta p - (-1+\eta t)\, \theta l\, \big(-6+6\eta^2 (1+\theta p\, (26+4\Phi 1-2\Phi 2)) + \\
& \quad \theta p\, (-4+6\Phi 2) - 9\eta\, (-6+\theta p\, (62+7\Phi 1+7\Phi 2))\big)\big)\big) + \\
& w^2 (-1+\eta)^2 \big(-2 x^5 (-1+\eta)^5\, \theta p\, \big(6+7\eta^2-\eta\, (13+7\eta t) - 2\, \theta l + \\
& \quad \theta l\, \Phi 1 + \eta t\, (7+2\, \theta l - \theta l\, \Phi 1)\big) + 2 x^4 (-1+\eta)^4 \\
& \quad \big((-1+\eta) \times \big(-90+33\eta+35\eta^2-21\eta t-35\eta\, \eta t\big)\, \theta p - \\
& \quad (-1+\eta t)\, \theta l\, (3+\eta\, \theta p\, (32+5\Phi 1) - 3\, \theta p\, (24+\Phi 2))\big) - x^3 (-1+\eta)^3 \\
& \quad \big(2 \times (-1+\eta) \times \big(70\eta^3+\eta^2 (192-70\eta t) - 3 \times (6+\eta t) - 12\eta\, (30+7\eta t)\big) \\
& \quad \theta p - (-1+\eta t)\, \theta l\, \big(54+4\eta^2\, \theta p\, (74+5\Phi 1) - \\
& \quad 3\, \theta p\, (26+11\Phi 1+9\Phi 2) - 6\eta\, (-3+4\, \theta p\, (24+\Phi 2))\big)\big) + \eta \\
& \quad \theta p \big(14\eta^6 - 2\eta t - 2\eta^5 (-50+7\eta t) - 2\eta^4 (147-\theta l\, (40+\Phi 1) + \\
& \quad \eta t\, (14+\theta l\, (40+\Phi 1))) + \eta\, (2\, \theta l\, \Phi 2 + \eta t\, (20-2\, \theta l\, \Phi 2)) + \\
& \quad 6\eta^3 (24-\theta l\, (24+\Phi 2) + \eta t\, (6+\theta l\, (24+\Phi 2))) + 3\eta^2 \\
& \quad (12-\theta l\, (14+5\Phi 1+3\Phi 2) + \eta t\, (-4+\theta l\, (14+5\Phi 1+3\Phi 2)))\big) - x \\
& \quad (-1+\eta) \times \big(70\eta^6\, \theta p + \eta^5 (374-70\eta t)\, \theta p + 4\eta t\, \theta p - \\
& \quad 2\eta^4\, \theta p\, (582-\theta l\, (158+5\Phi 1) + \eta t\, (49+\theta l\, (158+5\Phi 1))) + \\
& \quad \eta\, (86\eta t\, \theta p - 4 \times (-1+\eta t)\, \theta l\, (-2+\theta p\, \Phi 2)) + \\
& \quad 6\eta^3 ((102+25\eta t)\, \theta p + (-1+\eta t)\, \theta l\, (-1+4\, \theta p\, (24+\Phi 2))) + \\
& \quad 9\eta^2\, \theta p\, (12-\theta l\, (18+7\Phi 1+5\Phi 2) + \eta t\, (-8+\theta l\, (18+7\Phi 1+5\Phi 2)))\big) + \\
& x^2 (-1+\eta)^2 \big(2 \times (-1+\eta) \times \big(70\eta^4+\eta^3 (318-70\eta t) - 36\eta t - \\
& \quad 9\eta\, (6+\eta t) - 18\eta^2 (30+7\eta t)\big)\, \theta p - (-1+\eta t)\, \theta l \\
& \quad \big(-2+4\eta^3\, \theta p\, (116+5\Phi 1) + 2\, \theta p\, \Phi 2 - 18\eta^2 (-1+2\, \theta p\, (24+\Phi 2)) - \\
& \quad 9\eta\, (-6+\theta p\, (22+9\Phi 1+7\Phi 2))\big)\big)\big) - w^4 (-1+\eta)^4 \\
& \big(x^3 (-1+\eta)^3 (6 \times (-1+\eta) \times (-6+7\eta-7\eta t)\, \theta p + (-1+\eta t)\, \theta l \\
& \quad (-18+\theta p\, (34+5\Phi 1+9\Phi 2))) + \eta\, \theta p\, \big(-42\eta^4+6\eta t+6\eta^3 (6+7\eta t) + \\
& \quad \eta^2 (66+\eta t\, (-22+\theta l\, (6+\Phi 1-3\Phi 2)) - \theta l\, (6+\Phi 1-3\Phi 2)) + \\
& \quad 2\eta\, (-30-\theta l\, (-22+\Phi 1+3\Phi 2) + \eta t\, (-13+\theta l\, (-22+\Phi 1+3\Phi 2)))\big) + x \\
& \quad (-1+\eta) \times \big(126\eta^4\, \theta p + 12\eta t\, \theta p - 6\eta^3 (25+21\eta t)\, \theta p + \\
& \quad 2\eta\, ((60+23\eta t)\, \theta p - 2 \times (-1+\eta t)\, \theta l\, (-6+\theta p\, (-22+\Phi 1+3\Phi 2))) + \\
& \quad \eta^2\, \theta p\, (-96-\theta l\, (22+3\Phi 1+15\Phi 2) + \eta t\, (68+\theta l\, (22+3\Phi 1+15\Phi 2)))\big) - \\
& x^2 (-1+\eta)^2 \big(2 \times (-1+\eta) \times \big(-30+63\eta^2-19\eta t-3\eta\, (11+21\eta t)\big) \\
& \quad \theta p + (-1+\eta t)\, \theta l\, (6-2\, \theta p\, (-22+\Phi 1+3\Phi 2) +
\end{aligned}
$$

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                η (-18 + θp (62 + 9 Φ1 + 21 Φ2)))))))) +
cσ f (-1 + η)^2 (w^5 (-1 + η)^6 (2 x^5 (-1 + η)^5 θp (η - ηt + 4 μ1) -
      2 x^4 (-1 + η)^3 ((-1 + ηt) θl (-4 + 4 μ1 + μ2) + (-1 + η) θp
          (4 + 5 η^2 + 12 μ1 + η (2 - 5 ηt + 20 μ1 - 7 μ2) + ηt (-2 + 7 μ2))) -
      2 η θp (η^5 + ηt μ2 + 2 η ηt (-2 - 2 μ1 + μ2) - η^4 (-2 + ηt - 4 μ1 + 7 μ2) +
         η^3 (5 + 12 μ1 - 13 μ2 + ηt (-2 + 7 μ2)) + η^2
          (4 + 8 μ1 + 8 μ2 + ηt (-5 + 10 μ1 + 8 μ2))) +
      x (10 η^6 θp + η^3 (-2 θp (7 + 24 μ1 - 63 μ2) + ηt θp (-11 + 53 μ1 - 5 μ2) +
             (-1 + ηt) θl (-11 + 15 μ1 - μ2)) + 2 η^5
          θp (3 - 5 ηt + 20 μ1 - 28 μ2) - ηt θp (3 + 3 μ1 + 5 μ2) + η
          (ηt θp (13 + 11 μ1 - 9 μ2) - (-1 + ηt) θl (3 + 3 μ1 + μ2)) + 2 η^4 θp (11 +
            28 μ1 - 11 μ2 + ηt (-3 + 28 μ2)) - η^2 (2 × (-1 + ηt) θl (7 + 8 μ1 + μ2) +
            24 θp (1 + 2 μ1 + 2 μ2) + ηt θp (-17 + 61 μ1 + 37 μ2))) -
      2 x^2 (-1 + η) × (10 η^5 θp + 2 η^4 θp (1 - 5 ηt + 20 μ1 - 21 μ2) - θl
          μ2 + ηt (θp + θl μ2 - 5 θp μ2) - η ((-1 + ηt) θl (11 + 12 μ1 - μ2) +
            12 θp (1 + 2 μ1 + 2 μ2) + ηt θp (-11 + 23 μ1 + 22 μ2)) + η^3
          θp (32 μ1 + 3 × (5 + μ2) + ηt (-2 + 42 μ2)) + η^2 ((-1 + ηt) θl
             (-15 + 19 μ1) + θp (-15 - 48 μ1 + 23 ηt μ1 + 63 μ2 - 15 ηt μ2))) +
      x^3 (-1 + η)^2 ((-1 + ηt) θl (-8 - 8 μ1 + 31 η μ1 + 3 η (-9 + μ2) + 4 μ2) +
         (-1 + η) θp (20 η^3 + 8 × (1 + 2 μ1 + 2 μ2) - 4 η^2 (-4 + 5 ηt - 20 μ1 + 14 μ2) +
            ηt (-7 + 13 μ1 + 19 μ2) + 2 η (17 + 48 μ1 - 13 μ2 + 4 ηt (-2 + 7 μ2))))) +
   w^4 (-1 + η)^4 (6 x^6 (-1 + η)^7 θp (η - ηt + 4 μ1) + η θp (6 η^7 + η^6
          (16 - 6 ηt + 24 μ1 - 42 μ2) + 12 η ηt (1 + μ1 - 2 μ2) - 6
          ηt μ2 + 2 η^5 (29 + 39 μ1 - 39 μ2 + ηt (-8 + 21 μ2)) + η^4
          (50 + 42 μ1 + 130 μ2 + 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
                μ1 (18 + Φ1 + 5 Φ2)) - ηt (4 - 110 μ1 - 46 μ2 +
                3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
         2 η^3 (32 + 39 μ1 - 25 μ2 - 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
                μ1 (18 + Φ1 + 5 Φ2)) + ηt (-2 + 20 μ1 + 9 μ2 +
                3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
         η^2 (66 + 66 μ1 + 60 μ2 - 3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
                μ1 (18 + Φ1 + 5 Φ2)) + ηt (-10 + 82 μ1 + 40 μ2 +
                3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) -
      x^5 (-1 + η)^5 (6 × (-1 + ηt) θl (10 μ1 + 3 μ2) + θp (36 η^3 - 6 ×
             (9 + 17 μ1) - 2 η^2 (7 + 18 ηt - 72 μ1 + 21 μ2) +
            2 η (16 - 21 μ1 + 21 μ2 + 7 ηt (1 + 3 μ2)) + 3 θl (μ2 (6 + 3 Φ1 - Φ2) +
                3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)) - ηt (-22 + 42 μ2 +
                3 θl (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
      x^2 (-1 + η)^2 (90 η^6 θp - 10 η^5 θp (-13 + 9 ηt - 36 μ1 + 42 μ2) - 6
          (θl μ2 - ηt θl μ2 + ηt θp (2 + 3 μ1 + 9 μ2)) + 2 η^4 θp
          (238 + 330 μ1 - 150 μ2 + 5 ηt (-13 + 42 μ2)) - 3 η
          (2 θp (33 + 33 μ1 + 30 μ2 + ηt (-6 + 31 μ1 + 33 μ2)) +
            (-1 + ηt) θl (2 × (8 + 9 μ1 - 6 μ2) +
                3 θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
         2 η^3 (-θp (27 - 78 μ1 + 501 μ2 + ηt (41 + 288 μ1 + 63 μ2)) +
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                3 × (-1 + ηt) θl (3 - 54 μ1 - 9 μ2 + 5 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) - 6
            η^2 (θp (92 + 111 μ1 + 17 μ2 + ηt (-19 + 62 μ1 + 49 μ2)) +
                (-1 + ηt) θl (13 - 13 μ1 - 14 μ2 + 6 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
        x^3 (-1 + η)^3 (-((-1 + η) θp (66 + 120 η^4 + 66 μ1 + 60 μ2 - 20 η^3
                  (-11 + 6 ηt - 24 μ1 + 21 μ2) + ηt (-1 + 67 μ1 + 91 μ2) +
                 4 η^2 (161 + 255 μ1 - 120 μ2 + 5 ηt (-11 + 21 μ2)) +
                 η (490 + 576 μ1 + 262 μ2 + ηt (-86 + 356 μ1 + 370 μ2)))) +
            3 × (-1 + ηt) θl (4 + 4 μ1 - 10 μ2 + θp (μ2 (6 + 3 Φ1 - Φ2) +
                  3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)) + 2 η^2 (3 - 74 μ1 - 15 μ2 +
                  5 θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))) +
                η (19 - 25 μ1 - 35 μ2 + 8 θp (μ2 (6 + 3 Φ1 - Φ2) +
                      3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
        x^4 (-1 + η)^4 (2 × (-1 + η) θp (60 + 45 η^3 + 72 μ1 + 42 μ2 - 5 η^2
                 (-11 + 9 ηt - 36 μ1 + 21 μ2) + ηt (-10 + 41 μ1 + 47 μ2) +
                η (148 + 255 μ1 - 60 μ2 + 5 ηt (-11 + 21 μ2)) - (-1 + ηt) θl
             (6 × (2 - 4 μ1 - 7 μ2 + θp (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) +
                      μ1 (18 + Φ1 + 5 Φ2))) + η (6 - 268 μ1 - 66 μ2 + 15 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) -
        x (-1 + η) × (36 η^7 θp + 2 η^6 θp (37 - 18 ηt + 72 μ1 - 105 μ2) - 3
             ηt θp (3 + 3 μ1 + 5 μ2) + η
             (3 ηt θp (3 + μ1 - 23 μ2) - 3 × (-1 + ηt) θl (3 + 3 μ1 + μ2)) + 2
             η^5 θp (3 × (44 + 61 μ1 - 45 μ2) + ηt (-37 + 105 μ2)) - 3
             η^2 (θp (66 + 66 μ1 + 60 μ2 + ηt (-15 + 67 μ1 + 49 μ2)) +
                (-1 + ηt) θl (2 × (6 + 7 μ1 - μ2) + 3 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) -
            η^3 (θp (6 × (52 + 63 μ1 - 11 μ2) + ηt (-53 + 205 μ1 + 127 μ2)) +
                3 × (-1 + ηt) θl (11 - 9 μ1 - 7 μ2 + 8 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2)))) +
            η^4 (2 θp (68 + 33 μ1 + 297 μ2 + ηt (6 + 206 μ1 + 74 μ2)) -
                (-1 + ηt) θl (6 - 88 μ1 - 12 μ2 + 15 θp
                      (μ2 (6 + 3 Φ1 - Φ2) + 3 × (6 + Φ1 + Φ2) + μ1 (18 + Φ1 + 5 Φ2))))) +
    w^3 (-1 + η)^3 (6 x^7 (-1 + η)^8 θp (η - ηt + 4 μ1) - x^6 (-1 + η)^6
        (6 × (-1 + η) θp (19 + 7 η^2 + 27 μ1 + 7 ηt (-1 + μ2) - 7 η (-1 + ηt - 4 μ1 + μ2)) +
            (-1 + ηt) θl (78 μ1 - 2 × (3 + μ2) +
                θp (-108 - 12 μ2 - Φ1 + μ1 (-96 + 9 Φ1 - 17 Φ2) - 5 Φ2 + 22 μ2 Φ2)) +
        η θp (-6 η^8 + 6 ηt μ2 + 12 η ηt (1 + μ1 + 5 μ2) + 6 η^7 (-6 + ηt - 4 μ1 + 7 μ2) -
            2 η^6 (77 + 69 μ1 - 81 μ2 + 3 ηt (-6 + 7 μ2)) - η^5 (2 × (76 + 88 μ1 + 55 μ2) +
                θl (122 + 4 Φ1 + μ2 (14 + 3 Φ1 - 19 Φ2) - 2 μ1 (-55 + Φ1 - 12 Φ2) + 8 Φ2) +
                ηt (-32 + 166 μ1 + 88 μ2 - θl (122 + 4 Φ1 + μ2 (14 + 3 Φ1 - 19 Φ2) -
                      2 μ1 (-55 + Φ1 - 12 Φ2) + 8 Φ2))) + η^3 (4 × (47 + 50 μ1 + 31 μ2) -
                θl (230 + 56 Φ1 + μ2 (122 + 57 Φ1 - 17 Φ2) + 52 Φ2 + 10 μ1
                      (29 + Φ1 + 8 Φ2)) + ηt (-50 + 210 μ1 + 28 μ2 + θl (230 + 56 Φ1 +
                      μ2 (122 + 57 Φ1 - 17 Φ2) + 52 Φ2 + 10 μ1 (29 + Φ1 + 8 Φ2)))) + η^2
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(42 + 70 μ1 + 60 μ2 - θl (54 + 26 Φ1 + 22 Φ2 + μ2 (54 + 27 Φ1 + Φ2) +
      μ1 (90 + 6 Φ1 + 28 Φ2)) + ηt (-12 + 38 μ1 + 66 μ2 + θl (54 + 26 Φ1 +
          22 Φ2 + μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^4
(118 + 68 μ1 - 278 μ2 - θl (298 + 34 Φ1 + μ2 (82 + 33 Φ1 - 37 Φ2) +
      38 Φ2 + 2 μ1 (155 + Φ1 + 38 Φ2)) + ηt
    (-2 × (12 + 47 μ1 + 15 μ2) + θl (298 + 34 Φ1 + μ2 (82 + 33 Φ1 - 37 Φ2) +
          38 Φ2 + 2 μ1 (155 + Φ1 + 38 Φ2))))) + x^5 (-1 + η)^5
 ((-1 + η) θp (126 η^3 + η (766 + 972 μ1 + 252 ηt (-1 + μ2) - 204 μ2) -
      126 η^2 (-2 + ηt - 4 μ1 + 2 μ2) + 26 × (11 + 13 μ1 + 6 μ2) +
      ηt (-77 + 107 μ1 + 127 μ2)) + (-1 + ηt) θl
    (-16 + 88 μ1 + 50 μ2 - θp (270 + 28 Φ1 + μ2 (78 + 27 Φ1 - 43 Φ2) + 32 Φ2 +
          μ1 (282 - 12 Φ1 + 62 Φ2)) + η (-27 + 449 μ1 - 7 μ2 - θp (662 + 9 Φ1 +
              μ2 (74 + 3 Φ1 - 129 Φ2) + 33 Φ2 + μ1 (590 - 47 Φ1 + 109 Φ2))))) -
x^4 (-1 + η)^4 (2 × (-1 + η) θp (107 + 105 η^4 + 135 μ1 + 5 η^2 (212 +
          243 μ1 + 63 ηt (-1 + μ2) - 102 μ2) + 124 μ2 -
      105 η^3 (-3 + ηt - 4 μ1 + 3 μ2) + ηt (-19 + 87 μ1 + 86 μ2) +
      η (746 + 845 μ1 + 265 μ2 + ηt (-191 + 297 μ1 + 319 μ2))) +
   (-1 + ηt) θl (2 - 10 μ1 + 112 μ2 - θp (216 + 53 Φ1 + 2 μ2
            (60 + 27 Φ1 - 10 Φ2) + 49 Φ2 + μ1 (276 + 3 Φ1 + 73 Φ2)) +
      η^2 (8 × (-6 + 127 μ1 - μ2) - 5 θp (338 + 6 Φ1 + μ2 (38 + 3 Φ1 -
                63 Φ2) + 18 Φ2 + μ1 (302 - 20 Φ1 + 58 Φ2))) +
      η (-76 + 438 μ1 + 188 μ2 - θp (μ2 (394 + 141 Φ1 - 209 Φ2) +
              2 × (689 + 73 Φ1 + 83 Φ2) + μ1 (1438 - 46 Φ1 + 324 Φ2))))) +
x^3 (-1 + η)^3 (2 × (-1 + η) θp (21 + 105 η^5 + 35 μ1 + 10 η^3 (155 +
          162 μ1 + 42 ηt (-1 + μ2) - 102 μ2) + 30 μ2 -
      105 η^4 (-4 + ηt - 4 μ1 + 4 μ2) + ηt (21 + 40 μ1 + 87 μ2) +
      η (436 + 540 μ1 + 464 μ2 + ηt (-82 + 391 μ1 + 338 μ2)) +
      η^2 (2 × (777 + 845 μ1 + 140 μ2) + ηt (-379 + 653 μ1 + 641 μ2))) +
   (-1 + ηt) θl (6 × (2 + 2 μ1 + 11 μ2) - θp (54 + 26 Φ1 + 22 Φ2 +
          μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)) +
      2 η^3 (-21 + 567 μ1 - μ2 - 5 θp (230 + 5 Φ1 + μ2 (26 + 3 Φ1 - 41 Φ2) +
              13 Φ2 + μ1 (206 - 11 Φ1 + 41 Φ2))) -
      η (6 × (6 + 10 μ1 - 49 μ2) + θp (878 + 215 Φ1 + μ2 (482 +
                219 Φ1 - 77 Φ2) + 199 Φ2 + μ1 (1118 + 19 Φ1 + 299 Φ2))) +
      2 η^2 (-66 + 393 μ1 + 132 μ2 - θp (μ2 (398 + 147 Φ1 - 203 Φ2) +
              2 × (703 + 76 Φ1 + 86 Φ2) + μ1 (1466 - 32 Φ1 + 338 Φ2))))) -
x^2 (-1 + η)^2 (126 η^7 θp - 126 η^6 θp (-4 + ηt - 4 μ1 + 5 μ2) + 2 η^5
    θp (950 + 963 μ1 - 705 μ2 + 63 ηt (-4 + 5 μ2)) - 6
    (θl μ2 - ηt θl μ2 + ηt θp (8 + 9 μ1 + 17 μ2)) - 3 η
    (2 θp (21 + 35 μ1 + 30 μ2 + ηt (6 + 26 μ1 + 63 μ2)) +
      (-1 + ηt) θl (4 + 6 μ1 - 32 μ2 + θp (54 + 26 Φ1 + 22 Φ2 +
              μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^4
    (2 θp (351 + 475 μ1 + 1050 μ2 + ηt (-61 + 712 μ1 + 329 μ2)) +
      (-1 + ηt) θl (2 × (-9 + 313 μ1 + μ2) - 5 θp (352 + 9 Φ1 +
              μ2 (40 + 6 Φ1 - 60 Φ2) + 21 Φ2 + μ1 (316 - 13 Φ1 + 65 Φ2)))) - 3
    η^2 (2 θp (201 + 235 μ1 + 186 μ2 + 2 ηt (-29 + 91 μ1 + 43 μ2)) +
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(-1 + ηt) θl (26 + 30 μ1 - 84 μ2 + θp (446 + 109 Φ1 + μ2 (242 + 111 Φ1 -
        37 Φ2) + 101 Φ2 + μ1 (566 + 13 Φ1 + 153 Φ2)))) + 2
    η^3 (-θp (950 + 880 μ1 - 618 μ2 + ηt (-244 + 61 μ1 + 146 μ2)) +
      (-1 + ηt) θl (-50 + 305 μ1 + 82 μ2 - θp (μ2 (402 + 153 Φ1 - 197 Φ2) +
          2 × (717 + 79 Φ1 + 89 Φ2) + μ1 (1494 - 18 Φ1 + 352 Φ2))))) +
  x (-1 + η) × (42 η^8 θp - 3 ηt θp (3 + 3 μ1 + 5 μ2) - 42 η^7 θp (-5 + ηt -
      4 μ1 + 6 μ2) + 2 η^6 θp (421 + 402 μ1 - 384 μ2 + 21 ηt (-5 + 6 μ2)) - 3
    η ((-1 + ηt) θl (3 + 3 μ1 + μ2) + ηt θp (17 + 19 μ1 + 51 μ2)) - 3
    η^2 (2 θp (21 + 35 μ1 + 30 μ2 + ηt (-3 + 19 μ1 + 45 μ2)) +
      (-1 + ηt) θl (2 × (4 + 5 μ1 - 5 μ2) + θp (54 + 26 Φ1 + 22 Φ2 +
          μ2 (54 + 27 Φ1 + Φ2) + μ1 (90 + 6 Φ1 + 28 Φ2)))) + η^5
    (θp (584 + 718 μ1 + 800 μ2 + ηt (-121 + 771 μ1 + 395 μ2)) +
      (-1 + ηt) θl (-3 + 137 μ1 + μ2 - θp (718 + 21 Φ1 +
          μ2 (82 + 15 Φ1 - 117 Φ2) + 45 Φ2 + μ1 (646 - 19 Φ1 + 137 Φ2)))) -
    η^3 (2 θp (389 + 435 μ1 + 310 μ2 + ηt (-115 + 387 μ1 + 107 μ2)) +
      (-1 + ηt) θl (10 × (4 + 4 μ1 - 7 μ2) + θp (906 + 221 Φ1 + μ2 (486 +
              225 Φ1 - 71 Φ2) + 205 Φ2 + μ1 (1146 + 33 Φ1 + 313 Φ2)))) +
    η^4 (θp (-774 - 610 μ1 + 183 ηt μ1 + 1020 μ2 + 5 ηt (37 + μ2)) +
      (-1 + ηt) θl (-28 + 174 μ1 + 38 μ2 - θp (μ2 (406 + 159 Φ1 - 191 Φ2) +
          2 × (731 + 82 Φ1 + 92 Φ2) + μ1 (1522 - 4 Φ1 + 366 Φ2))))) +
w^2 (-1 + η)^2 (2 x^8 (-1 + η)^9 θp (η - ηt + 4 μ1) - x^7 (-1 + η)^7
    (2 × (-1 + η) θp (49 + 8 η^2 + 57 μ1 + η (17 - 8 ηt + 32 μ1 - 7 μ2) +
        ηt (-17 + 7 μ2)) + (-1 + ηt) θl (4 + 44 μ1 +
        θp (-102 - Φ1 + μ1 (-74 + 3 Φ1 - 11 Φ2) - 7 Φ2 + 2 μ2 (-6 + 5 Φ2))) +
  x^6 (-1 + η)^6 (2 × (-1 + η) θp (119 + 28 η^3 + 165 μ1 + 54 μ2 -
        7 η^2 (-17 + 4 ηt - 16 μ1 + 7 μ2) + ηt (-41 + 28 μ1 + 49 μ2) +
        η (398 + 399 μ1 - 76 μ2 + 7 ηt (-17 + 7 μ2))) + (-1 + ηt) θl
      (-22 + 94 μ1 - 6 μ2 + θp (μ1 (-260 + 41 Φ1 - 37 Φ2) - 3 × (72 + Φ1 + 5 Φ2) +
            μ2 (-52 + 66 Φ2)) + η (24 + 324 μ1 + θp (-738 - 80 μ2 -
            7 Φ1 + 2 μ1 (-270 + 5 Φ1 - 44 Φ2) - 49 Φ2 + 70 μ2 Φ2)))) +
  η θp (2 η^9 - 2 ηt μ2 - 28 η ηt (1 + μ1 + 2 μ2) - 2 η^8 (-16 + ηt - 4 μ1 +
        7 μ2) + 2 η^7 (87 + 53 μ1 - 69 μ2 + ηt (-16 + 7 μ2)) + η^5
      (-90 + 64 μ1 + 198 ηt μ1 + 366 μ2 + 40 ηt μ2 - 3 × (-1 + ηt) θl
          (94 + 4 Φ1 + μ2 (18 + 3 Φ1 - 19 Φ2) + 8 Φ2 + μ1 (108 - 3 Φ1 + 23 Φ2))) -
    η^2 (4 × (5 + 5 μ1 + 4 μ2) - θl (48 + 25 Φ1 + 19 Φ2 + μ2 (50 + 27 Φ1 + 11 Φ2) +
            μ1 (48 + 11 Φ1 + 19 Φ2)) + ηt (-8 - 26 μ1 + 64 μ2 + θl (48 + 25 Φ1 +
              19 Φ2 + μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^3
      (-2 × (43 + 85 μ1 + 86 μ2) + 3 θl (42 + 20 Φ1 + μ2 (46 + 21 Φ1 - 5 Φ2) +
            16 Φ2 + μ1 (76 - Φ1 + 21 Φ2)) + ηt (2 × (30 - 57 μ1 + μ2) - 3 θl (42 +
              20 Φ1 + μ2 (46 + 21 Φ1 - 5 Φ2) + 16 Φ2 + μ1 (76 - Φ1 + 21 Φ2)))) +
    η^6 (156 + 216 μ1 - 38 μ2 + θl (126 + 8 μ2 + Φ1 + 7 Φ2 - 10 μ2 Φ2 +
            μ1 (96 + 8 Φ1 + 22 Φ2)) - ηt (48 - 116 μ1 - 84 μ2 +
            θl (126 + 8 μ2 + Φ1 + 7 Φ2 - 10 μ2 Φ2 + μ1 (96 + 8 Φ1 + 22 Φ2)))) + η^4
      (12 × (-14 - 17 μ1 + μ2) + θl (234 + 46 Φ1 + μ2 (134 + 45 Φ1 - 73 Φ2) +
            46 Φ2 + μ1 (408 - 31 Φ1 + 91 Φ2)) +
        ηt (-6 × (-7 + 33 μ1 + 3 μ2) - θl (234 + 46 Φ1 + μ2
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                (134 + 45 Φ1 - 73 Φ2) + 46 Φ2 + μ1 (408 - 31 Φ1 + 91 Φ2))))) +
x^5 (-1 + η)^5 (-((-1 + η) θp (226 + 112 η^4 + 394 μ1 + 352 μ2 - 14 η^3
          (-51 + 8 ηt - 32 μ1 + 21 μ2) + ηt (-91 + 169 μ1 + 129 μ2) +
        6 η^2 (453 + 399 μ1 - 152 μ2 + 7 ηt (-17 + 7 μ2)) +
        2 η (777 + 990 μ1 + 175 μ2 + 6 ηt (-41 + 33 μ1 + 49 μ2)))) + (-1 + ηt)
    θl (52 + 60 μ1 - 42 μ2 + θp (174 + 28 Φ1 + μ2 (118 + 27 Φ1 - 91 Φ2) +
          28 Φ2 + μ1 (346 - 62 Φ1 + 60 Φ2)) + 3 η^2 (-20 × (1 + 16 μ1) +
          θp (762 + 76 μ2 + 7 Φ1 + 49 Φ2 - 70 μ2 Φ2 + μ1 (562 + Φ1 + 99 Φ2))) +
      η (101 - 615 μ1 + 21 μ2 + θp (1362 + 314 μ2 + 27 Φ1 + 9 μ2 Φ1 +
            99 Φ2 - 387 μ2 Φ2 + μ1 (1624 - 214 Φ1 + 254 Φ2))))) -
x^4 (-1 + η)^4 (-2 × (-1 + η) θp (53 + 70 η^5 + 95 μ1 + 106 μ2 - 35 η^4
          (-17 + 2 ηt - 8 μ1 + 7 μ2) + ηt (-20 + 27 μ1 + 60 μ2) +
        5 η^3 (508 + 399 μ1 - 228 μ2 + 7 ηt (-17 + 7 μ2)) +
        5 η^2 (420 + 495 μ1 + 13 μ2 + 3 ηt (-41 + 38 μ1 + 49 μ2)) +
        η (589 + 985 μ1 + 792 μ2 + ηt (-223 + 495 μ1 + 327 μ2))) + (-1 + ηt) θl
    (-2 + 34 μ1 - 104 μ2 + θp (108 + 51 Φ1 + 2 μ2 (64 + 27 Φ1 - 12 Φ2) +
          39 Φ2 + μ1 (208 - 13 Φ1 + 53 Φ2)) + 5 η^3 (-8 × (2 + 37 μ1) + θp
           (786 + 72 μ2 + 7 Φ1 + 49 Φ2 - 70 μ2 Φ2 + 2 μ1 (292 + 6 Φ1 + 55 Φ2))) +
      η^2 (8 × (23 - 190 μ1 + 3 μ2) + 5 θp (714 + 158 μ2 + 18 Φ1 +
            9 μ2 Φ1 + 54 Φ2 - 189 μ2 Φ2 + μ1 (844 - 91 Φ1 + 143 Φ2))) +
      η (2 × (104 + 89 μ1 - 84 μ2) + θp (930 + 606 μ2 + 158 Φ1 + 153
             μ2 Φ1 + 158 Φ2 - 437 μ2 Φ2 + μ1 (1792 - 279 Φ1 + 331 Φ2))))) +
x^2 (-1 + η)^2 (56 η^8 θp - 14 η^7 θp (-47 + 4 ηt - 16 μ1 + 21 μ2) + 2 η^6
    θp (1497 + 1085 μ1 - 993 μ2 + 7 ηt (-47 + 21 μ2)) - 2
    (θl μ2 - ηt θl μ2 + ηt θp (26 + 27 μ1 + 41 μ2)) - η
    (4 θp (3 × (5 + 5 μ1 + 4 μ2) + ηt (17 + 7 μ1 + 86 μ2)) +
      (-1 + ηt) θl (-2 × (16 + 15 μ1 + 46 μ2) + 3 θp (48 + 25 Φ1 + 19 Φ2 +
            μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^5
    (2 θp (561 + 1278 μ1 + 460 μ2 + 6 ηt (-43 + 120 μ1 + 98 μ2)) -
      3 × (-1 + ηt) θl (-4 × (2 + 47 μ1) + θp (834 + 64 μ2 + 7 Φ1 +
            49 Φ2 - 70 μ2 Φ2 + 2 μ1 (314 + 17 Φ1 + 66 Φ2)))) + η^2
    (-2 θp (36 × (8 + 15 μ1 + 16 μ2) + ηt (-180 + 214 μ1 + 147 μ2)) +
      (-1 + ηt) θl (-54 - 178 μ1 + 252 μ2 - 3 θp (234 + 266 μ2 + 111 Φ1 +
            117 μ2 Φ1 + 87 Φ2 - 39 μ2 Φ2 + μ1 (436 - 16 Φ1 + 116 Φ2)))) + η^4
    (2 θp (-1141 - 505 μ1 + ηt (187 + 560 μ1 - 63 μ2) + 1912 μ2) +
      (-1 + ηt) θl (-74 + 1050 μ1 + 6 μ2 - 5 θp (780 + 27 Φ1 +
            2 μ2 (80 + 9 Φ1 - 90 Φ2) + 63 Φ2 + μ1 (908 - 59 Φ1 + 175 Φ2)))) +
  2 η^3 (-θp (956 + 1400 μ1 + 632 μ2 + ηt (-308 + 1025 μ1 + 312 μ2)) +
      (-1 + ηt) θl (-104 - 27 μ1 + 84 μ2 - θp (μ2 (638 + 189 Φ1 - 401 Φ2) +
            2 × (525 + 97 Φ1 + 97 Φ2) + μ1 (1916 - 217 Φ1 + 393 Φ2))))) -
x (-1 + η) × (16 η^9 θp + 2 η^8 θp (111 - 8 ηt + 32 μ1 - 49 μ2) - ηt θp
    (3 + 3 μ1 + 5 μ2) + 2 η^7 θp (554 + 367 μ1 - 407 μ2 + ηt (-111 + 49 μ2)) - η
    ((-1 + ηt) θl (3 + 3 μ1 + μ2) + ηt θp (77 + 79 μ1 + 135 μ2)) - η^2
    (2 θp (6 × (5 + 5 μ1 + 4 μ2) + ηt (5 - 19 μ1 + 128 μ2)) +
      (-1 + ηt) θl (-2 × (2 + μ1 + 17 μ2) + 3 θp (48 + 25 Φ1 + 19 Φ2 +
            μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)))) + η^6
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(2 θp (356 + 591 μ1 + 35 μ2 + ηt (-127 + 318 μ1 + 245 μ2)) -
   (-1 + ηt) θl (-4 × (1 + 26 μ1) + θp (858 + 60 μ2 + 7 Φ1 +
         49 Φ2 - 70 μ2 Φ2 + μ1 (650 + 45 Φ1 + 143 Φ2)))) + η^3
(-2 θp (14 × (13 + 25 μ1 + 26 μ2) + ηt (-125 + 179 μ1 + 42 μ2)) +
   (-1 + ηt) θl (-28 - 72 μ1 + 74 μ2 - θp (486 + 542 μ2 + 231 Φ1 +
         243 μ2 Φ1 + 183 Φ2 - 69 μ2 Φ2 + μ1 (892 - 22 Φ1 + 242 Φ2)))) +
η^5 (θp (-2 × (368 + 5 μ1 - 949 μ2) + ηt (73 + 789 μ1 + 93 μ2)) +
   (-1 + ηt) θl (-13 + 239 μ1 + 3 μ2 - θp (1626 + 322 μ2 + 63 Φ1 + 45 μ2 Φ1 +
         135 Φ2 - 351 μ2 Φ2 + μ1 (1880 - 86 Φ1 + 382 Φ2)))) + η^4
(-θp (898 + 1210 μ1 + 280 μ2 + ηt (-259 + 1023 μ1 + 201 μ2)) +
   (-1 + ηt) θl (2 × (-26 + μ1 + 21 μ2) - θp (1110 + 212 Φ1 + μ2 (654 + 207
            Φ1 - 383 Φ2) + 212 Φ2 + μ1 (1978 - 186 Φ1 + 424 Φ2))))) +
x^3 (-1 + η)^3 (-2 × (-1 + η) θp (56 η^6 + 2 × (5 + 5 μ1 + 4 μ2) - 7 η^5
      (-85 + 8 ηt - 32 μ1 + 35 μ2) + ηt (25 + 20 μ1 + 76 μ2) +
      5 η^4 (563 + 399 μ1 - 304 μ2 + 7 ηt (-17 + 7 μ2)) +
      10 η^3 (301 + 330 μ1 - 41 μ2 + ηt (-82 + 86 μ1 + 98 μ2)) +
      η (4 × (53 + 95 μ1 + 103 μ2) + ηt (-80 + 139 μ1 + 240 μ2)) +
      η^2 (ηt (-437 + 1135 μ1 + 663 μ2) + 2 × (613 + 985 μ1 + 704 μ2))) +
   (-1 + ηt) θl (-2 × (14 + 14 μ1 + 29 μ2) + θp (48 + 25 Φ1 + 19 Φ2 +
         μ2 (50 + 27 Φ1 + 11 Φ2) + μ1 (48 + 11 Φ1 + 19 Φ2)) +
      η (24 + 140 μ1 - 282 μ2 + 3 θp (150 + 71 Φ1 + μ2 (174 + 75 Φ1 - 29 Φ2) +
            55 Φ2 + μ1 (284 - 14 Φ1 + 74 Φ2))) + 2 η^3 (83 - 905 μ1 +
         3 μ2 + 5 θp (498 + 15 Φ1 + μ2 (106 + 9 Φ1 - 123 Φ2) + 39 Φ2 +
            μ1 (584 - 50 Φ1 + 106 Φ2))) + 5 η^4 (-12 × (1 + 21 μ1) + θp (810 +
            68 μ2 + 7 Φ1 + 49 Φ2 - 70 μ2 Φ2 + μ1 (606 + 23 Φ1 + 121 Φ2))) +
      η^2 (6 × (52 + 29 μ1 - 42 μ2) + θp (2 μ2 (622 + 171 Φ1 - 419 Φ2) +
            44 × (45 + 8 Φ1 + 8 Φ2) + μ1 (3708 - 496 Φ1 + 724 Φ2))))) -
w (x (-1 + η) - η) (-1 + η) × (2 x^7 (-1 + η)^7 θp (-15 + 5 η^2 + 5 ηt + 15
      θl - 5 η (-2 + ηt - 3 μ1) - 15 μ1 + 7 θl μ1 + θl Φ2 - ηt θl (15 + 7 μ1 + Φ2)) +
   x^6 (-1 + η)^6 (-2 × (-1 + η) θp (29 + 35 η^2 + 71 μ1 + η (139 - 35 ηt +
         105 μ1 - 21 μ2) + 10 μ2 + 2 ηt (-11 + 7 μ2)) + (-1 + ηt) θl
      (-8 - 28 × (2 + η) μ1 + η θp (234 + 14 Φ2 + 7 μ1 (16 + Φ1 + Φ2)) +
         2 θp (33 + Φ1 + 6 Φ2 - 2 μ2 (-7 + 5 Φ2) + μ1 (59 - 7 Φ1 + 7 Φ2)))) +
   x^5 (-1 + η)^5 (2 × (-1 + η) θp (37 + 105 η^3 + 121 μ1 + 92 μ2 +
         5 ηt (-5 + 8 μ1 + 7 μ2) - 3 η^2 (-173 + 35 ηt - 105 μ1 + 42 μ2) +
         η (227 + 426 μ1 - 15 μ2 + 2 ηt (-66 + 7 μ1 + 42 μ2)) -
      (-1 + ηt) θl (26 + 14 μ1 + 6 μ2 + θp (48 + 3 Φ1 + μ2 (68 - 66 Φ2) +
            11 Φ2 + μ1 (204 - 55 Φ1 + 23 Φ2)) +
         2 η^2 (-70 μ1 + 3 θp (129 + 7 Φ2 + 7 μ1 (9 + Φ1 + Φ2))) -
         2 η (20 + 186 μ1 + θp (μ1 (-376 + 31 Φ1 - 53 Φ2) +
            20 μ2 (-4 + 3 Φ2) - 6 × (37 + Φ1 + 6 Φ2))))) +
   η θp (-10 η^8 + 6 ηt (2 + 2 μ1 + 3 μ2) + 2 η^7 (-44 + 5 ηt - 15 μ1 + 21 μ2) +
      η^6 (-66 - 112 μ1 + 88 μ2 - 2 θl (27 + Φ2) - 7 θl μ1 (4 + Φ1 + Φ2) +
         ηt (34 - 28 μ1 - 28 μ2 + 2 θl (27 + Φ2) + 7 θl μ1 (4 + Φ1 + Φ2))) + η
      (-θl (12 + 8 Φ1 + 6 Φ2 + 2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)) +
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        ηt (-4 - 10 μ1 + 30 μ2 + θl (12 + 8 Φ1 + 6 Φ2 +
              2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)))) + η^2
      (40 × (1 + μ1 + μ2) - θl (48 + 24 Φ1 + 3 μ2 (18 + 9 Φ1 - Φ2) + 14 Φ2 +
            μ1 (46 - 5 Φ1 + 13 Φ2)) + ηt (-2 × (14 + 25 μ1 + 3 μ2) + θl (48 +
              24 Φ1 + 3 μ2 (18 + 9 Φ1 - Φ2) + 14 Φ2 + μ1 (46 - 5 Φ1 + 13 Φ2)))) +
    2 η^5 (21 - 50 μ1 - 81 μ2 - θl (57 + Φ1 - 10 μ2 (-1 + Φ2) + 6 Φ2 +
            μ1 (81 + 4 Φ1 + 18 Φ2)) + ηt (3 - 72 μ1 - 21 μ2 +
            θl (57 + Φ1 - 10 μ2 (-1 + Φ2) + 6 Φ2 + μ1 (81 + 4 Φ1 + 18 Φ2)))) + η^3
      (2 × (23 + 65 μ1 + 74 μ2) - θl (66 + 26 Φ1 + μ2 (86 + 27 Φ1 - 47 Φ2) +
            18 Φ2 + μ1 (162 - 40 Φ1 + 30 Φ2)) +
        ηt (2 × (-6 + 91 μ1 + 6 μ2) + θl (66 + 26 Φ1 + μ2 (86 + 27 Φ1 - 47 Φ2) +
              18 Φ2 + μ1 (162 - 40 Φ1 + 30 Φ2)))) + η^4
      (12 × (3 + 6 μ1 - 13 μ2) - θl (90 + 12 Φ1 + μ2 (66 + 9 Φ1 - 57 Φ2) +
            20 Φ2 + μ1 (262 - 26 Φ1 + 52 Φ2)) +
        ηt (2 × (-9 + 19 μ1 + 8 μ2) + θl (90 + 12 Φ1 + μ2 (66 + 9 Φ1 - 57 Φ2) +
              20 Φ2 + μ1 (262 - 26 Φ1 + 52 Φ2))))) +
x^4 (-1 + η)^4 (-((-1 + η) θp (86 + 350 η^4 + 170 μ1 + 228 μ2 + ηt
            (-41 + 49 μ1 + 45 μ2) - 10 η^3 (-207 + 35 ηt - 105 μ1 + 63 μ2) +
          2 η (209 + 605 μ1 + 246 ηt μ1 + 384 μ2 + 25 ηt (-5 + 7 μ2)) +
          10 η^2 (140 + 213 μ1 - 45 μ2 + 2 ηt (-33 + 7 μ1 + 21 μ2))) + (-1 + ηt)
      θl (56 + 112 μ1 - 6 μ2 + θp (30 + 8 Φ1 + μ2 (66 + 9 Φ1 - 65 Φ2) +
            μ1 (122 - 60 Φ1 + 10 Φ2)) +
        5 η^3 (-56 μ1 + θp (282 + 14 Φ2 + 7 μ1 (20 + 3 Φ1 + 3 Φ2))) -
        2 η^2 (8 × (5 + 58 μ1) + 5 θp (μ1 (-199 + 10 Φ1 - 32 Φ2) -
              3 × (41 + Φ1 + 6 Φ2) + μ2 (-38 + 30 Φ2))) +
        η (95 - 29 μ1 + 15 μ2 + θp (282 + 24 Φ1 + μ2 (338 + 9 Φ1 - 321 Φ2) +
              64 Φ2 + μ1 (1078 - 246 Φ1 + 144 Φ2))))) -
x^3 (-1 + η)^3 (-((-1 + η) θp (350 η^5 + 8 × (5 + 5 μ1 + 6 μ2) + ηt
            (-32 - 54 μ1 + 30 μ2) - 10 η^4 (-241 + 35 ηt - 105 μ1 + 84 μ2) +
          4 η^2 (233 + 605 μ1 + 292 ηt μ1 + 308 μ2 + 25 ηt (-5 + 7 μ2)) +
          20 η^3 (111 + 142 μ1 - 55 μ2 + 2 ηt (-22 + 7 μ1 + 14 μ2)) +
          η (8 × (43 + 85 μ1 + 109 μ2) + ηt (-155 + 281 μ1 + 189 μ2))) +
    (-1 + ηt) θl (2 × (5 + 7 μ1 - 15 μ2) + θp (2 μ2 (20 + 9 Φ1 - 6 Φ2) +
            5 × (6 + 3 Φ1 + Φ2) + μ1 (34 - 11 Φ1 + 7 Φ2)) +
        10 η^4 (-28 μ1 + θp (153 + 7 Φ2 + 7 μ1 (11 + 2 Φ1 + 2 Φ2))) -
        4 η^3 (20 + 278 μ1 + 5 θp (3 μ1 Φ1 + 4 μ2 (-6 + 5 Φ2) -
              5 μ1 (28 + 5 Φ2) - 2 × (45 + Φ1 + 6 Φ2))) +
        η (6 × (26 + 55 μ1 - 5 μ2) + 2 θp (78 + 25 Φ1 + μ2 (142 + 27 Φ1 -
                121 Φ2) + 9 Φ2 + μ1 (264 - 110 Φ1 + 30 Φ2))) +
        η^2 (129 - 171 μ1 + 9 μ2 + θp (648 + 66 Φ1 + 12 μ2 (56 + 3 Φ1 -
                52 Φ2) + 146 Φ2 + μ1 (2272 - 434 Φ1 + 346 Φ2))))) +
x^2 (-1 + η)^2 (-((-1 + η) θp (210 η^6 - 6 η ηt (14 + 26 μ1 - 17 μ2) +
          8 η (15 + 15 μ1 + 17 μ2) - 30 η^5
            (-55 + 7 ηt - 21 μ1 + 21 μ2) + ηt (11 + 11 μ1 + 51 μ2) +
          4 η^3 (257 + 605 μ1 + 338 ηt μ1 + 232 μ2 + 25 ηt (-5 + 7 μ2)) +
          10 η^4 (193 + 213 μ1 - 120 μ2 + ηt (-66 + 28 μ1 + 42 μ2)) +
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                3 η^2 (ηt (-73 + 183 μ1 + 99 μ2) + 4 × (43 + 85 μ1 + 104 μ2))) +
        (-1 + ηt) θl (-6 × (2 + 2 μ1 + 3 μ2) + θp (12 + 8 Φ1 + 6 Φ2 +
              2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)) +
           η (23 + 37 μ1 - 57 μ2 + θp (μ2 (134 + 63 Φ1 - 27 Φ2) -
                 3 μ1 (-38 + 9 Φ1 - 9 Φ2) + 6 × (18 + 9 Φ1 + 4 Φ2))) +
           η^5 (-140 μ1 + 3 θp (330 + 14 Φ2 + 7 μ1 (24 + 5 Φ1 + 5 Φ2))) -
           6 η^2 (-24 - 54 μ1 + 7 μ2 - θp (48 + 17 Φ1 + 2 μ2 (38 + 9 Φ1 - 28 Φ2) +
                 9 Φ2 + μ1 (142 - 50 Φ1 + 20 Φ2))) + 2 η^4 (-4 × (5 + 81 μ1) + 5 θp
              (μ2 (34 - 30 Φ2) + 3 × (49 + Φ1 + 6 Φ2) + μ1 (221 + Φ1 + 43 Φ2))) +
           η^3 (77 - 199 μ1 - 3 μ2 + θp (732 + 84 Φ1 + μ2 (668 + 54 Φ1 - 606 Φ2) +
                 164 Φ2 + μ1 (2388 - 376 Φ1 + 404 Φ2)))) +
     x (-1 + η) × (70 η^8 θp + 2 η^7 θp (274 - 35 ηt + 105 μ1 - 126 μ2) - 6
        ηt θp (3 + 3 μ1 + 4 μ2) - η (ηt θp (1 - 5 μ1 + 75 μ2) +
           2 × (-1 + ηt) θl (-3 × (1 + μ1 + 2 μ2) + θp
              (12 + 8 Φ1 + 6 Φ2 + 2 μ1 (6 + 4 Φ1 + 3 Φ2) + μ2 (14 + 9 Φ1 + 7 Φ2)))) +
        η^2 (θp (ηt (91 + 163 μ1 - 15 μ2) - 8 × (15 + 15 μ1 + 16 μ2)) +
           (-1 + ηt) θl (-13 - 23 μ1 + 27 μ2 - θp (126 + 63 Φ1 +
                 2 μ2 (74 + 36 Φ1 - 9 Φ2) + 33 Φ2 + μ1 (126 - 21 Φ1 + 33 Φ2)))) +
        η^3 (-θp (8 × (28 + 70 μ1 + 83 μ2) + ηt (-65 + 601 μ1 + 93 μ2)) +
           2 × (-1 + ηt) θl (-22 - 53 μ1 + 9 μ2 - θp (114 + 43 Φ1 +
                 μ2 (162 + 45 Φ1 - 103 Φ2) + 27 Φ2 + μ1 (304 - 90 Φ1 + 50 Φ2)))) -
        2 η^5 (-θp (-158 + 179 μ1 + 471 μ2 + ηt (7 + 314 μ1 + 91 μ2)) +
           (-1 + ηt) θl (-4 - 74 μ1 + θp (μ2 (64 - 60 Φ2) +
                 6 × (53 + Φ1 + 6 Φ2) + μ1 (464 + 13 Φ1 + 97 Φ2)))) + η^4
         (-θp (218 + 530 μ1 - 480 μ2 + ηt (-113 + 317 μ1 + 143 μ2)) +
           (-1 + ηt) θl (-17 + 71 μ1 + 3 μ2 - θp (408 + 51 Φ1 + μ2 (332 + 36 Φ1 -
                 294 Φ2) + 91 Φ2 + μ1 (1252 - 159 Φ1 + 231 Φ2)))) - 2
         η^6 (-14 × (-1 + ηt) θl μ1 + θp (-130 - 321 μ1 + 189 μ2 -
              θl (177 + 7 Φ2 + 7 μ1 (13 + 3 Φ1 + 3 Φ2)) + ηt (97 - 70 μ1 -
                 84 μ2 + θl (177 + 7 Φ2 + 7 μ1 (13 + 3 Φ1 + 3 Φ2)))))) -
  (x + η - x η)^2 (-2 x^6 (-1 + η)^6 θp (3 + 8 η^2 - 3 θl - 11 μ1 + 7 θl μ1 + η
         (-11 + 4 θl - 4 ηt (1 + θl) + 11 μ1) + θl Φ2 + ηt (4 - θl (-3 + 7 μ1 + Φ2))) +
     x^5 (-1 + η)^5 (2 × (-1 + η) θp (-2 + 48 η^2 + 26 μ1 + 10 μ2 +
              ηt (-8 + 7 μ2) - 2 η (1 + 12 ηt - 33 μ1 + 7 μ2)) - (-1 + ηt)
         θl (-4 + 48 η^2 θp + 16 θp μ2 + θp Φ1 + 5 θp Φ2 - 10 θp μ2 Φ2 +
           η (-28 μ1 + 7 θp μ1 (14 + Φ1 + Φ2) + 4 θp (-5 + 3 Φ2)) +
           μ1 (-12 + θp (44 - 11 Φ1 + 3 Φ2)))) +
     η θp (-16 η^7 + 4 ηt μ2 + 2 η^6 (-5 - 4 θl + 4 ηt (1 + θl) - 11 μ1 + 14 μ2) +
        η^5 (14 - 30 μ1 - 8 μ2 - 2 θl (5 + Φ2) - 7 θl μ1 (4 + Φ1 + Φ2) +
           ηt (8 - 28 μ1 - 14 μ2 + 2 θl (5 + Φ2) + 7 θl μ1 (4 + Φ1 + Φ2))) + η^2
         (4 × (5 + 5 μ1 + 6 μ2) - θl (12 - 10 μ1 (-1 + Φ1) + 5 Φ1 +
              2 μ2 (8 + 3 Φ1 - 4 Φ2) + Φ2) + ηt (4 - 4 μ2 +
              θl (12 - 10 μ1 (-1 + Φ1) + 5 Φ1 + 2 μ2 (8 + 3 Φ1 - 4 Φ2) + Φ2))) +
        η^4 (-4 ηt (3 + 7 μ1) + 2 × (-5 + μ1 - 40 μ2) - θl (8 + Φ1 + 5 Φ2 -
              2 μ2 (-6 + 5 Φ2) + 2 μ1 (33 + 7 Φ2)) +
           ηt θl (8 + Φ1 + 5 Φ2 - 2 μ2 (-6 + 5 Φ2) + 2 μ1 (33 + 7 Φ2))) +
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    η^3 (2 + 30 μ1 + 70 ηt μ1 + 36 μ2 + 10 ηt μ2 + (-1 + ηt) θl
          (18 + 4 Φ1 + μ2 (26 + 3 Φ1 - 19 Φ2) + 4 Φ2 + μ1 (48 - 19 Φ1 + 7 Φ2))) + η
      (-θl (2 × (1 + μ1) Φ1 + μ2 (2 + 3 Φ1 + Φ2)) + ηt (-8 + 2 θl Φ1 +
            2 μ1 (-7 + θl Φ1) + μ2 (4 + θl (2 + 3 Φ1 + Φ2)))))) +
x^2 (-1 + η)^2 (-2 × (-1 + η) θp (120 η^5 + ηt (-7 - 8 μ1 + μ2) -
        5 η^4 (-23 + 12 ηt - 33 μ1 + 28 μ2) +
        η (30 + 30 μ1 + 44 μ2 + ηt (-9 - 20 μ1 + 3 μ2)) +
        6 η^2 (11 + 25 μ1 + 34 μ2 + ηt (-2 + 20 μ1 + 7 μ2)) +
        η^3 (4 × (7 + 65 μ1 - 5 μ2) + ηt (-80 + 84 μ1 + 70 μ2))) + (-1 + ηt) θl
      (120 η^5 θp + 2 × (3 + 3 μ1 + μ2) - θp (6 + Φ1 + 3 Φ2 + 2 μ2 (2 + Φ2) +
            μ1 (6 + Φ1 + 3 Φ2)) - 2 η^3 (8 + 72 μ1 + θp (-24 - 68 μ2 -
                5 Φ1 + μ1 (-286 + 22 Φ1 - 48 Φ2) - 25 Φ2 + 50 μ2 Φ2)) +
        2 η^4 (-56 μ1 + 5 θp (7 + 3 Φ2 + 7 μ1 (5 + Φ1 + Φ2))) +
        η (2 × (17 + 23 μ1 + μ2) + θp (μ2 (32 + 6 Φ1 - 36 Φ2) + 3 × (4 + Φ1 - 3 Φ2) -
                6 μ1 (-3 + 6 Φ1 + Φ2))) + η^2 (24 + 92 μ1 + 3 θp (μ2 (54 + 3 Φ1 -
                    41 Φ2) + 5 × (6 + Φ1 + Φ2) + μ1 (88 - 42 Φ1 + 10 Φ2))))) -
x^3 (-1 + η)^3 (-((-1 + η) θp (320 η^4 + ηt (-7 - 13 μ1 + μ2) - 40 η^3
            (-5 + 4 ηt - 11 μ1 + 7 μ2) + 4 × (5 + 5 μ1 + 8 μ2) +
          8 η (11 + 25 μ1 + 36 μ2 + ηt (-2 + 16 μ1 + 7 μ2)) + 4 η^2
            (2 × (3 + 65 μ1 + 5 μ2) + ηt (-40 + 28 μ1 + 35 μ2)))) + (-1 + ηt) θl
      (20 + 160 η^4 θp + 4 μ2 + 8 θp μ2 - θp Φ1 + μ1 (24 + θp (4 - 13 Φ1 - 3 Φ2)) -
        5 θp Φ2 - 14 θp μ2 Φ2 - 2 η^2 (12 + 84 μ1 + θp (-16 - 72 μ2 -
                5 Φ1 + μ1 (-264 + 33 Φ1 - 37 Φ2) - 25 Φ2 + 50 μ2 Φ2)) +
        2 η^3 (-84 μ1 + 5 θp (4 × (1 + Φ2) + 7 μ1 (6 + Φ1 + Φ2))) +
        η (27 + 91 μ1 + 3 μ2 + θp (54 + 7 Φ1 + μ2 (110 + 3 Φ1 - 85 Φ2) +
                7 Φ2 + μ1 (168 - 88 Φ1 + 16 Φ2)))) +
x^4 (-1 + η)^4 (-2 × (-1 + η) θp (11 + 120 η^3 + 25 μ1 + 38 μ2 + ηt
            (-2 + 12 μ1 + 7 μ2) - 5 η^2 (-7 + 12 ηt - 33 μ1 + 14 μ2) +
        η (-2 + 130 μ1 + 30 μ2 + ηt (-40 + 14 μ1 + 35 μ2))) +
    (-1 + ηt) θl (120 η^3 θp + 2 × (5 + 15 μ1 + μ2) + θp
            (12 + 28 μ2 + Φ1 + Φ2 - 22 μ2 Φ2 + μ1 (40 - 23 Φ1 + 3 Φ2)) +
        η^2 (-112 μ1 + 5 θp (-2 + 6 Φ2 + 7 μ1 (8 + Φ1 + Φ2))) +
        η (-16 × (1 + 5 μ1) + θp (8 + 76 μ2 + 5 Φ1 + 25 Φ2 -
                50 μ2 Φ2 + μ1 (242 - 44 Φ1 + 26 Φ2)))) +
x (-1 + η) × (96 η^7 θp + ηt θp (3 + 3 μ1 - μ2) - 4 η^6 θp (-7 - 12 θl +
        12 ηt (1 + θl) - 33 μ1 + 35 μ2) + η^4
      (2 θp (22 - 30 μ1 + ηt (32 + 40 μ1 - 7 μ2) + 158 μ2) +
        (-1 + ηt) θl (4 + 44 μ1 + θp (-32 - 64 μ2 - 5 Φ1 +
                μ1 (-308 + 11 Φ1 - 59 Φ2) - 25 Φ2 + 50 μ2 Φ2))) + η^2
      (θp (ηt (-7 + 11 μ1 + μ2) - 20 × (3 + 3 μ1 + 4 μ2)) + (-1 + ηt)
            θl (2 × (-7 - 11 μ1 + μ2) + θp (-2 μ2 (20 + 6 Φ1 - 15 Φ2) +
                3 × (-8 - 3 Φ1 + Φ2) + 3 μ1 (-8 + 11 Φ1 + Φ2)))) + η^3
      (-θp (4 × (7 + 35 μ1 + 44 μ2) + ηt (-1 + 233 μ1 + 47 μ2)) +
        (-1 + ηt) θl (-7 - 31 μ1 + μ2 - θp (66 + 13 Φ1 + μ2 (106 + 9 Φ1 - 79 Φ2) +
                13 Φ2 + μ1 (184 - 80 Φ1 + 24 Φ2)))) + η
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                    (ηt θp (19 + 27 μ1 - 9 μ2) - (-1 + ηt) θl (3 + 3 μ1 - μ2 +
                          θp (-6 + Φ1 + μ2 (-2 + 3 Φ1 - Φ2) - 3 Φ2 + μ1 (Φ1 - 3 × (2 + Φ2))))) +
                  η^5 (28 × (-1 + ηt) θl μ1 + θp (16 × (-5 + 8 μ1 + 5 μ2) + θl
                          (44 + 12 Φ2 + 7 μ1 (22 + 5 Φ1 + 5 Φ2)) - ηt (32 - 112 μ1 -
                            70 μ2 + θl (44 + 12 Φ2 + 7 μ1 (22 + 5 Φ1 + 5 Φ2)))))))))) /
    (24 cv (-1 + w (-1 + η))^3 (x (-1 + η) - η)^3 (1 + x + η - x η)^2
      (w +
         x +
         η -
         w η -
         x η)^3 (-1 + ηt) θp))

δγs =
 - ((f w (-1 + η)^2 (2 x^2 (2 w (-1 + η) - 3 η) (-1 + η)^2 (-1 + η + θl - ηt θl) θp (1 + 7 μ1) + 2 x^3
          (-1 + η)^3 (-1 + η + θl - ηt θl) θp (1 + 7 μ1) +
        x (-1 + η) × (2 × (-1 + η) (w^2 (-1 + η)^2 - 4 w (-1 + η) η + 3 η^2) θp (1 + 7 μ1) -
            (-1 + ηt) θl (2 - 2 θp + 6 η^2 θp - 10 μ1 + 10 θp μ1 +
                42 η^2 θp μ1 - θp Φ1 + 5 θp μ1 Φ1 - θp Φ2 + 5 θp μ1 Φ2 -
                2 w (-1 + η) × (2 - 10 μ1 + 4 η θp (1 + 7 μ1) + θp (-1 + 5 μ1) × (2 + Φ1 + Φ2)) +
                w^2 (-1 + η)^2 (2 - θp (Φ1 + Φ2) + μ1 (-10 + θp (24 + 5 Φ1 + 5 Φ2))))) +
        θp (2 η^3 - 2 η^4 - 2 ηt + 2 η ηt + 2 η θl - 2 η^3 θl - 2 η ηt θl + 2 η^3 ηt θl +
            14 η^3 μ1 - 14 η^4 μ1 + 10 ηt μ1 - 10 η ηt μ1 - 10 η θl μ1 - 14 η^3 θl μ1 +
            10 η ηt θl μ1 + 14 η^3 ηt θl μ1 + η θl Φ1 - η ηt θl Φ1 - 5 η θl μ1 Φ1 +
            5 η ηt θl μ1 Φ1 + η θl Φ2 - η ηt θl Φ2 - 5 η θl μ1 Φ2 + 5 η ηt θl μ1 Φ2 +
            2 w (-1 + η) × (2 ηt (1 - 5 μ1) + 2 η^3 (1 + 7 μ1) - 2 η^2 (1 + (-1 + ηt) θl) ×
                (1 + 7 μ1) - η (-1 + 5 μ1) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2)))) -
            w^2 (-1 + η)^2 (2 ηt (1 - 5 μ1) + 2 η^2 (1 + 7 μ1) - η (2 + 14 μ1 +
                θl Φ1 + θl Φ2 - θl μ1 (24 + 5 Φ1 + 5 Φ2) +
                ηt (2 - θl (Φ1 + Φ2) + μ1 (-10 + θl (24 + 5 Φ1 + 5 Φ2))))))))) /
    (24 (-1 + w (-1 + η))^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)^2
      (-1 + ηt)
      θp))
```

```
δγs1 = (f w (-1 + η)^2 (2 x^2 (2 w (-1 + η) - 3 η) (-1 + η)^2 (-1 + η + θl - ηt θl) θp (-7 + 5 μ1) +
      2 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp (-7 + 5 μ1) +
      x (-1 + η) × (2 × (-1 + η) (w^2 (-1 + η)^2 - 4 w (-1 + η) η + 3 η^2) θp (-7 + 5 μ1) -
         (-1 + ηt) θl (10 - 10 θp - 42 η^2 θp - 14 μ1 + 14 θp μ1 +
            30 η^2 θp μ1 - 5 θp Φ1 + 7 θp μ1 Φ1 - 5 θp Φ2 + 7 θp μ1 Φ2 -
            2 w (-1 + η) × (10 - 14 μ1 + 4 η θp (-7 + 5 μ1) + θp (-5 + 7 μ1) × (2 + Φ1 + Φ2)) +
            w^2 (-1 + η)^2 (10 - 14 μ1 + θp (-24 - 5 Φ1 - 5 Φ2 + μ1 (24 + 7 Φ1 + 7 Φ2))))) +
      θp (-14 η^3 + 14 η^4 - 10 ηt + 10 η ηt + 10 η θl + 14 η^3 θl - 10 η ηt θl - 14 η^3 ηt θl +
         10 η^3 μ1 - 10 η^4 μ1 + 14 ηt μ1 - 14 η ηt μ1 - 14 η θl μ1 - 10 η^3 θl μ1 +
         14 η ηt θl μ1 + 10 η^3 ηt θl μ1 + 5 η θl Φ1 - 5 η ηt θl Φ1 - 7 η θl μ1 Φ1 +
         7 η ηt θl μ1 Φ1 + 5 η θl Φ2 - 5 η ηt θl Φ2 - 7 η θl μ1 Φ2 + 7 η ηt θl μ1 Φ2 +
         2 w (-1 + η) × (2 ηt (5 - 7 μ1) + 2 η^3 (-7 + 5 μ1) - 2 η^2 (1 + (-1 + ηt) θl) ×
            (-7 + 5 μ1) - η (-5 + 7 μ1) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2)))) -
         w^2 (-1 + η)^2 (2 ηt (5 - 7 μ1) + 2 η^2 (-7 + 5 μ1) +
            η (14 - 10 μ1 + θl (-24 - 5 Φ1 - 5 Φ2 + μ1 (24 + 7 Φ1 + 7 Φ2)) + ηt
               (2 × (-5 + 7 μ1) + θl (24 + 5 Φ1 + 5 Φ2 - μ1 (24 + 7 Φ1 + 7 Φ2))))))) /
   (48 (-1 + w (-1 + η))^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)^2
      (-1 + ηt)
      θp
      μ1)

δγs2 -
  ((f w (-1 + η)^2 (2 x^2 (2 w (-1 + η) - 3 η) (-1 + η)^2 (-1 + η + θl - ηt θl) θp (1 + μ1 + 12 μ2) +
        2 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp (1 + μ1 + 12 μ2) +
        x (-1 + η) × (2 × (-1 + η) (w^2 (-1 + η)^2 - 4 w (-1 + η) η + 3 η^2) θp (1 + μ1 + 12 μ2) +
           (-1 + ηt) θl (-2 + 2 θp - 6 η^2 θp - 2 μ1 + 2 θp μ1 - 6 η^2 θp μ1 -
              72 η^2 θp μ2 + θp Φ1 + θp μ1 Φ1 + θp Φ2 + θp μ1 Φ2 + 2 w (-1 + η) ×
               (2 × (1 + μ1) + 4 η θp (1 + μ1 + 12 μ2) - θp (1 + μ1) × (2 + Φ1 + Φ2)) +
              w^2 (-1 + η)^2 (-2 + θp (-24 μ2 + Φ1 + Φ2) + μ1 (-2 + θp (Φ1 + Φ2))))) +
        θp (2 η^3 - 2 η^4 - 2 ηt + 2 η ηt + 2 η θl - 2 η^3 θl - 2 η ηt θl + 2 η^3 ηt θl + 2 η^3 μ1 -
           2 η^4 μ1 - 2 ηt μ1 + 2 η ηt μ1 + 2 η θl μ1 - 2 η^3 θl μ1 - 2 η ηt θl μ1 + 2 η^3 ηt θl μ1 +
           24 η^3 μ2 - 24 η^4 μ2 - 24 η^3 θl μ2 + 24 η^3 ηt θl μ2 + η θl Φ1 - η ηt θl Φ1 + η θl μ1 Φ1 -
           η ηt θl μ1 Φ1 + η θl Φ2 - η ηt θl Φ2 + η θl μ1 Φ2 - η ηt θl μ1 Φ2 + 2 w (-1 + η) ×
            (2 ηt (1 + μ1) + 2 η^3 (1 + μ1 + 12 μ2) - 2 η^2 (1 + (-1 + ηt) θl) × (1 + μ1 + 12 μ2) +
               η (1 + μ1) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2)))) -
           w^2 (-1 + η)^2 (2 ηt (1 + μ1) + 2 η^2 (1 + μ1 + 12 μ2) +
              η (-2 - 24 μ2 + 24 θl μ2 - θl Φ1 - θl Φ2 - μ1 (2 + θl (Φ1 + Φ2)) +
                 ηt (-2 + θl (-24 μ2 + Φ1 + Φ2) + μ1 (-2 + θl (Φ1 + Φ2))))))) /
   (48 (-1 + w (-1 + η))^2 (x (-1 + η) - η) (w (-1 + η) + x (-1 + η) - η)^2
      (-1 + ηt)
      θp
      μ2))

δJ =
  - ((4 cv cσ f w (-1 + η)^3 (x^2 (-1 + η)^2 + η (1 + η) + x (1 + η - 2 η^2)) (4 x^5 (-1 + η)^5 (-1 + η +
```

```
    θl - ηt θl) θp + x^4 (-1 + η)^4 (4 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 +
    θp (4 + 16 η - 20 η^2 - 4 θl - 20 η θl + 4 ηt θl + 20 η ηt θl - 2 θl μ1 + 2 ηt θl μ1 -
        2 θl μ2 + 2 ηt θl μ2 - θl μ1 Φ1 + ηt θl μ1 Φ1 - θl μ1 Φ2 + ηt θl μ1 Φ2 + w
         (-1 + η) × (-12 + 12 η - (-1 + ηt) θl (2 × (6 + μ2) + μ1 (2 + Φ1 + Φ2)))) ) +
θp (-3 w^2 (-1 + η)^2 (1 + η) × (4 η^3 - 6 ηt (1 + μ1 + μ2) + η^2
         (4 × (-1 + ηt μ1 + μ2) - (-1 + ηt) θl (2 × (2 + μ2) + μ1 (2 + Φ1 + Φ2))) + η
         (-4 μ2 + 2 ηt (3 + μ1 + 3 μ2) +
           θl (3 × (2 + Φ1 + Φ2) + 4 μ1 (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)) -
           ηt θl (3 × (2 + Φ1 + Φ2) + 4 μ1 (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)))) +
    w^3 (-1 + η)^3 (4 η^3 - 6 ηt (1 + μ1 + μ2) - η (4 + 8 ηt μ1 + 8 μ2 +
           (-1 + ηt) θl (5 μ1 (2 + Φ1 + Φ2) + (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) + η^2
         (8 μ2 + 5 θl μ1 (2 + Φ1 + Φ2) + θl (1 + μ2) × (10 + 3 Φ1 + 3 Φ2) -
           ηt (-2 × (3 + 7 μ1 + 3 μ2) + 5 θl μ1 (2 + Φ1 + Φ2) +
               θl (1 + μ2) × (10 + 3 Φ1 + 3 Φ2)))) +
    w (-1 + η) × (12 η^5 - 18 ηt (1 + μ1 + μ2) + η^4 (4 (ηt μ1 + μ2) - (-1 + ηt)
              θl (2 × (6 + μ2) + μ1 (2 + Φ1 + Φ2))) + η^3 (12 × (-1 + ηt μ1 + μ2) -
           (-1 + ηt) θl (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2))) - η
         (4 (ηt μ1 + μ2) + (-1 + ηt) θl (9 × (2 + Φ1 + Φ2) + 10 μ1 (2 + Φ1 + Φ2) +
               μ2 (20 + 9 Φ1 + 9 Φ2))) + η^2 (-12 μ2 + 6 ηt (3 + μ1 + 3 μ2) +
           θl (9 × (2 + Φ1 + Φ2) + 14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2)) -
           ηt θl (9 × (2 + Φ1 + Φ2) + 14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2)))) -
    (1 + η) × (4 η^5 - 4 η^4 (1 + (-1 + ηt) θl) - 6 ηt (1 + μ1 + μ2) - 3 η
         (1 + μ1 + μ2) (-θl (2 + Φ1 + Φ2) + ηt (-2 + θl (2 + Φ1 + Φ2))) - η^2
         (4 μ2 - 2 θl μ2 + 2 ηt θl μ2 - θl μ1 (2 + Φ1 + Φ2) +
           ηt μ1 (4 + θl (2 + Φ1 + Φ2))) + η^3 (4 μ2 + 2 θl μ2 +
           θl μ1 (2 + Φ1 + Φ2) - ηt (2 θl μ2 + μ1 (-4 + θl (2 + Φ1 + Φ2))))) ) +
x^3 (-1 + η)^3 (40 η^3 θp - 8 η^2 (3 + 5 × (-1 + ηt) θl) θp - 4 θp (ηt μ1 + μ2) -
    2 × (-1 + ηt) θl (2 θp μ2 + μ1 (-2 + θp (2 + Φ1 + Φ2))) +
    3 w^2 (-1 + η)^2 (4 × (-1 + ηt) θl μ1 + θp (-4 + 4 η - (-1 + ηt) θl
              (2 × (2 + μ2) + μ1 (2 + Φ1 + Φ2)))) + 2 η (6 × (-1 + ηt) θl μ1 + 2 θp
         (-4 + ηt μ1 + μ2 - (-1 + ηt) θl (2 × (2 + μ2) + μ1 (2 + Φ1 + Φ2)))) -
    w (-1 + η) × (4 × (4 + 3 η) × (-1 + ηt) θl μ1 + θp (48 η^2 - 4 × (3 + ηt μ1 + μ2) -
           (-1 + ηt) θl (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2)) -
           4 η (9 - ηt μ1 - μ2 + (-1 + ηt) θl (2 × (6 + μ2) + μ1 (2 + Φ1 + Φ2))))) ) +
x^2 (-1 + η)^2 (4 × (-1 + η) θp (w^3 (-1 + η)^3 - 6 η^2 - 10 η^3 - ηt μ1 - 3 η ηt
         μ1 - μ2 - 3 η μ2 - 3 w^2 (-1 + η)^2 (1 + 3 η + ηt μ1 + μ2) + w (-1 + η) ×
         (18 η^2 + 4 (ηt μ1 + μ2) + 3 η (3 + ηt μ1 + μ2)) ) - (-1 + ηt) θl
       (6 - 6 θp - 24 η^2 θp - 40 η^3 θp + 6 μ1 + 8 η μ1 + 12 η^2 μ1 - 8 θp μ1 - 12 η θp
         μ1 - 12 η^2 θp μ1 + 6 μ2 - 8 θp μ2 - 12 η θp μ2 - 12 η^2 θp μ2 - 3 θp Φ1 - 4 θp
         μ1 Φ1 - 6 η θp μ1 Φ1 - 6 η^2 θp μ1 Φ1 - 3 θp μ2 Φ1 - 3 θp Φ2 - 4 θp μ1 Φ2 - 6 η
         θp μ1 Φ2 - 6 η^2 θp μ1 Φ2 - 3 θp μ2 Φ2 + w^3 (-1 + η)^3 (-2 × (3 + 7 μ1 + 3 μ2) +
           5 θp μ1 (2 + Φ1 + Φ2) + θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2)) - 3 w^2 (-1 + η)^2
         (-2 × (3 + 5 μ1 + 4 η μ1 + 3 μ2) + θp (6 η (2 + μ2) + 5 μ1 (2 + Φ1 + Φ2) +
               3 η μ1 (2 + Φ1 + Φ2) + (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) + w (-1 + η) ×
         (-2 × ((11 + 16 η + 6 η^2) μ1 + 9 × (1 + μ2)) + θp (18 + 28 μ2 + 9 Φ1 +
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                    9 μ2 Φ1 + 9 Φ2 + 9 μ2 Φ2 + 14 μ1 (2 + Φ1 + Φ2) + 6 η^2 (2 × (6 + μ2) +
                        μ1 (2 + Φ1 + Φ2)) + 3 η (2 × (6 + 5 μ2) + 5 μ1 (2 + Φ1 + Φ2)))))) -
    x (-1 + η) × (2 × (-1 + η) θp (-8 η^3 - 10 η^4 - 3 ηt - 3 ηt μ1 - 4 η ηt μ1 -
          6 η^2 ηt μ1 - 4 η μ2 - 6 η^2 μ2 - 3 ηt μ2 - 3 w^2 (-1 + η)^2
           (6 η^2 + 2 μ2 + 4 η (1 + ηt μ1 + μ2) + ηt (3 + 5 μ1 + 3 μ2)) + w^3 (-1 + η)^3
           (2 + 4 η + 4 μ2 + ηt (3 + 7 μ1 + 3 μ2)) + w (-1 + η) × (24 η^3 + 2 μ2 +
             16 η (ηt μ1 + μ2) + 6 η^2 (3 + ηt μ1 + μ2) + ηt (9 + 11 μ1 + 9 μ2)) -
        (-1 + ηt) θl (6 + 6 η - 6 θp - 12 η θp - 16 η^3 θp - 20 η^4 θp + 6 μ1 + 6
           η μ1 + 4 η^2 μ1 + 4 η^3 μ1 - 6 θp μ1 - 16 η θp μ1 - 12 η^2 θp μ1 - 8 η^3 θp
           μ1 + 6 μ2 + 6 η μ2 - 6 θp μ2 - 16 η θp μ2 - 12 η^2 θp μ2 - 8 η^3 θp μ2 - 3
           θp Φ1 - 6 η θp Φ1 - 3 θp μ1 Φ1 - 8 η θp μ1 Φ1 - 6 η^2 θp μ1 Φ1 - 4 η^3
           θp μ1 Φ1 - 3 θp μ2 Φ1 - 6 η θp μ2 Φ1 - 3 θp Φ2 - 6 η θp Φ2 - 3 θp μ1
           Φ2 - 8 η θp μ1 Φ2 - 6 η^2 θp μ1 Φ2 - 4 η^3 θp μ1 Φ2 - 3 θp μ2 Φ2 - 6 η
           θp μ2 Φ2 + w^3 (-1 + η)^3 (-6 × (1 + μ1 + μ2) + 5 θp μ1 (2 + Φ1 + Φ2) +
             θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2) + 2 η (-3 - 7 μ1 - 3 μ2 + 5 θp μ1
                (2 + Φ1 + Φ2) + θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) - 3 w^2 (-1 + η)^2
           (-6 × (1 + μ1 + μ2) + η^2 (-4 μ1 + 6 θp (2 + μ2) + 3 θp μ1 (2 + Φ1 + Φ2)) +
             θp (3 × (2 + Φ1 + Φ2) + 4 μ1 (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)) +
             2 η (-3 - 5 μ1 - 3 μ2 + 5 θp μ1 (2 + Φ1 + Φ2) +
                θp (1 + μ2) × (10 + 3 Φ1 + 3 Φ2))) + w (-1 + η) ×
           (-18 × (1 + μ1 + μ2) + 4 η^3 (-μ1 + 2 θp (6 + μ2) + θp μ1 (2 + Φ1 + Φ2)) +
             η^2 (-16 μ1 + 6 θp (6 + 5 μ2) + 15 θp μ1 (2 + Φ1 + Φ2)) +
             θp (9 × (2 + Φ1 + Φ2) + 10 μ1 (2 + Φ1 + Φ2) + μ2 (20 + 9 Φ1 + 9 Φ2)) +
             2 η (-9 - 11 μ1 - 9 μ2 + θp (9 × (2 + Φ1 + Φ2) +
                   14 μ1 (2 + Φ1 + Φ2) + μ2 (28 + 9 Φ1 + 9 Φ2))))))) +
    (-1 + x (-1 + η) - η) × (2 cv^2 f w^2 (-1 + η)^3 (x^2 (-1 + η)^2 + η (1 + η) +
        x (1 + η - 2 η^2))
      (-4 x^3 (3 w (-1 + η) - 4 η) (-1 + η)^3 (-1 + η + θl - ηt θl) θp -
        4 x^4 (-1 + η)^4 (-1 + η + θl - ηt θl) θp -
        12 x^2 (-1 + η)^2 (w^2 (-1 + η)^2 - 3 w (-1 + η) η + 2 η^2) (-1 + η + θl - ηt θl) θp +
        θp (4 η^4 - 4 η^5 + 6 ηt - 6 η ηt - 6 η θl - 4 η^4 θl + 6 η ηt θl + 4
           η^4 ηt θl - 3 η θl Φ1 + 3 η ηt θl Φ1 - 3 η θl Φ2 + 3 η ηt θl
           Φ2 - 3 w^2 (-1 + η)^2 (4 η^3 - 6 ηt - 4 η^2 (1 + (-1 + ηt) θl) +
             η (6 ηt + 3 θl (2 + Φ1 + Φ2) - 3 ηt θl (2 + Φ1 + Φ2))) + 3
           w (-1 + η) × (4 η^4 - 6 ηt - 4 η^3 (1 + (-1 + ηt) θl) + η
                (6 ηt + 3 θl (2 + Φ1 + Φ2) - 3 ηt θl (2 + Φ1 + Φ2))) + w^3 (-1 + η)^3 (4 η^2 -
             6 ηt + η (-4 + 6 ηt + θl (10 + 3 Φ1 + 3 Φ2) - ηt θl (10 + 3 Φ1 + 3 Φ2))) -
        x (-1 + η) × (4 (w (-1 + η) - 4 η) (-1 + η) (w + η - w η)^2 θp - (-1 + ηt)
           θl (6 - 6 θp - 16 η^3 θp - 3 θp Φ1 - 3 θp Φ2 - 3 w^2 (-1 + η)^2 (-6 + 8 η θp +
                3 θp (2 + Φ1 + Φ2)) + 9 w (-1 + η) × (-2 + θp (2 + 4 η^2 + Φ1 + Φ2)) +
             w^3 (-1 + η)^3 (-6 + θp (10 + 3 Φ1 + 3 Φ2))))) -
    (-1 + w (-1 + η)) (w (-1 + η) + x (-1 + η) - η) (272 u^2 (-1 + x (-1 + η) - η)
        (1 + w - w η)^2 (x + η - x η)^2 (w + x + η - w η - x η)^2 (-1 + ηt) θp -
        8 f (-1 + x (-1 + η) - η) × (-1 + η) (x + η - x η)^2
```

```
(-uκ (w (-1 + η) + x (-1 + η) - η) (1 + w - w η)^2 (-1 + ηt) θl
    θp + 2 u (-1 + η) × (3 x^2 (-1 + η)^2 (-1 + w (-1 + ηt) θl) θp +
      2 x (-3 (w (-1 + η) - η) (-1 + η) θp + (-1 + ηt) θl
          (1 + w^2 (-1 + η)^2 (1 + 3 θp) - w (-1 + η) × (2 + 3 η θp))) +
      θp (-3 η^2 - 2 ηt + w^3 (-1 + η)^2 (-1 + ηt) θl (5 + Φ1 + Φ2) +
         w (η (-6 + 4 ηt) + 3 η^2 (2 + (-1 + ηt) θl) -
            θl (2 + Φ1 + Φ2) + ηt (-4 + θl (2 + Φ1 + Φ2))) -
         w^2 (-1 + η) × (-3 - 4 θl + η (3 - 6 θl + ηt (2 + 6 θl)) -
            2 θl Φ1 - 2 θl Φ2 + 2 ηt (-1 + θl (2 + Φ1 + Φ2))))))) +
f^2 (-1 + η)^2 θl ((x^2 (-1 + η)^2 + η (1 + η) + x (1 + η - 2 η^2))
    (40 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp + 4 x^2 (-1 + η)^2
       (-((-1 + η) θp (2 + 30 η + Φ1 + Φ2)) + 2 × (-1 + ηt) θl (-1 +
            θp (2 + 15 η + Φ1 + Φ2))) + θp (-40 η^4 + 4 η^3 (8 + 10 × (-1 + ηt)
             θl - Φ1 - Φ2) + 6 ηt (2 + Φ1 + Φ2) + η (-3 θl (2 + Φ1 + Φ2)^2 +
            3 ηt θl (2 + Φ1 + Φ2)^2 - 2 ηt (2 + 3 Φ1 + 3 Φ2)) + 4 η^2
           (-((-1 + 2 θl) × (2 + Φ1 + Φ2)) + 2 ηt (-1 + θl (2 + Φ1 + Φ2)))) +
      x (-1 + η) × (8 × (-1 + η) θp (15 η^2 + ηt + η (2 + Φ1 + Φ2)) -
         (-1 + ηt) θl (120 η^2 θp + 3 × (2 + Φ1 + Φ2) × (-2 + θp (2 + Φ1 + Φ2)) +
            8 η (-1 + 2 θp (2 + Φ1 + Φ2))))) - w^3 (-1 + η)^3
    (40 x^3 (-1 + η)^3 (-1 + η + θl - ηt θl) θp + x^2 (-1 + η)^2 (-8 × (-1 + η)
          θp (7 + 15 η + Φ1 + Φ2) + (-1 + ηt) θl (-2 × (14 + 3 Φ1 + 3 Φ2) +
            θp (84 + 120 η + 28 Φ1 + 3 Φ1^2 + 28 Φ2 + 6 Φ1 Φ2 + 3 Φ2^2))) +
      θp (-40 η^4 + 8 η^3 (-2 + 5 × (-1 + ηt) θl - Φ1 - Φ2) + 6 ηt (2 + Φ1 + Φ2) +
         η (-3 θl (2 + Φ1 + Φ2)^2 + ηt (16 + 3 θl (2 + Φ1 + Φ2)^2)) +
         η^2 (8 × (7 + Φ1 + Φ2) - 2 ηt (14 + 3 Φ1 + 3 Φ2) -
            θl (84 + 3 Φ1^2 + 28 Φ2 + 3 Φ2^2 + Φ1 (28 + 6 Φ2)) +
            ηt θl (84 + 3 Φ1^2 + 28 Φ2 + 3 Φ2^2 + Φ1 (28 + 6 Φ2)))) +
      x (-1 + η) × (2 × (-1 + η) θp (60 η^2 + 8 η (7 + Φ1 + Φ2) +
            ηt (14 + 3 Φ1 + 3 Φ2)) - (-1 + ηt) θl (120 η^2 θp +
            3 × (2 + Φ1 + Φ2) × (-2 + θp (2 + Φ1 + Φ2)) + 2 η (-14 - 3 Φ1 -
               3 Φ2 + θp (84 + 28 Φ1 + 3 Φ1^2 + 28 Φ2 + 6 Φ1 Φ2 + 3 Φ2^2))))) +
   w (-1 + x (-1 + η) - η) × (-1 + η) × (-40 x^4 (-1 + η)^4 (-1 + η +
         θl - ηt θl) θp + 4 x^3 (-1 + η)^3 (2 × (-1 + η) θp (12 + 20 η + Φ1 + Φ2) -
         (-1 + ηt) θl (-2 + θp (26 + 40 η + 3 Φ1 + 3 Φ2))) + 2 x^2 (-1 + η)^2
        (-2 × (-1 + η) θp (2 + 60 η^2 + 2 ηt + Φ1 + Φ2 + 6 η (12 + Φ1 + Φ2)) + (-1 +
            ηt) θl (120 η^2 θp - 2 × (10 + 3 Φ1 + 3 Φ2) + 3 θp (8 + Φ1^2 + 6 Φ2 +
               Φ2^2 + 2 Φ1 (3 + Φ2)) + 2 η (-4 + θp (78 + 9 Φ1 + 9 Φ2)))) +
      θp (-40 η^5 + 8 η^4 (-7 + 5 × (-1 + ηt) θl - Φ1 - Φ2) + 6 ηt
         (2 + Φ1 + Φ2) + η (-3 θl (2 + Φ1 + Φ2)^2 +
            ηt (28 + 6 Φ1 + 6 Φ2 + 3 θl (2 + Φ1 + Φ2)^2)) + 4 η^3 (22 + Φ1 + Φ2 -
            θl (26 + 3 Φ1 + 3 Φ2) + ηt (-2 + θl (26 + 3 Φ1 + 3 Φ2))) + 2 η^2
           (-((2 + Φ1 + Φ2) × (-2 + 3 θl (4 + Φ1 + Φ2))) + ηt (-2 × (8 + 3 Φ1 +
                 3 Φ2) + 3 θl (8 + Φ1^2 + 6 Φ2 + Φ2^2 + 2 Φ1 (3 + Φ2)))) +
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x (-1 + η) × (4 × (-1 + η) θp (40 η^3 + 6 η^2 (12 + Φ1 + Φ2) +
        2 η (2 + 2 ηt + Φ1 + Φ2) + ηt (10 + 3 Φ1 + 3 Φ2)) - (-1 + ηt) θl
      (160 η^3 θp + 3 × (2 + Φ1 + Φ2) × (-2 + θp (2 + Φ1 + Φ2)) +
        4 η^2 (-2 + θp (78 + 9 Φ1 + 9 Φ2)) + 4 η (-10 - 3 Φ1 - 3 Φ2 +
          3 θp (8 + Φ1^2 + 6 Φ2 + Φ2^2 + 2 Φ1 (3 + Φ2)))))) +
  w^2 (-1 + η)^2 (-80 x^4 (-1 + η)^4 (-1 + η + θl - ηt θl) θp +
    x^3 (-1 + η)^3 (8 × (-1 + η) θp (19 + 40 η + 2 Φ1 + 2 Φ2) -
      (-1 + ηt) θl (320 η θp - 2 × (14 + 3 Φ1 + 3 Φ2) +
        3 θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)))) +
    x^2 (-1 + η)^2 (-2 × (-1 + η) θp (240 η^2 + 4 × (7 + Φ1 + Φ2) +
        12 η (19 + 2 Φ1 + 2 Φ2) + ηt (14 + 3 Φ1 + 3 Φ2)) + (-1 + ηt) θl
      (480 η^2 θp - 4 η (14 + 3 Φ1 + 3 Φ2) - 2 × (34 + 9 Φ1 + 9 Φ2) +
        9 η θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)) + θp
         (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2)))) + θp (-80 η^5 +
      8 η^4 (-9 + 10 × (-1 + ηt) θl - 2 Φ1 - 2 Φ2) + 12 ηt (2 + Φ1 + Φ2) + 2 η
       (-3 θl (2 + Φ1 + Φ2)^2 + ηt (22 + 3 Φ1 + 3 Φ2 + 3 θl (2 + Φ1 + Φ2)^2)) +
      η^2 (8 × (7 + Φ1 + Φ2) - 4 ηt (10 + 3 Φ1 + 3 Φ2) -
        θl (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2)) +
        ηt θl (124 + 9 Φ1^2 + 60 Φ2 + 9 Φ2^2 + 6 Φ1 (10 + 3 Φ2))) +
      η^3 (8 × (12 + Φ1 + Φ2) - 3 θl (60 + Φ1^2 + 12 Φ2 + Φ2^2 +
          2 Φ1 (6 + Φ2)) + ηt (-2 × (14 + 3 Φ1 + 3 Φ2) +
          3 θl (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)))) + x (-1 + η) ×
     (2 × (-1 + η) θp (160 η^3 + 8 η (7 + Φ1 + Φ2) + 12 η^2 (19 + 2 Φ1 + 2 Φ2) +
        η ηt (28 + 6 Φ1 + 6 Φ2) + ηt (34 + 9 Φ1 + 9 Φ2)) - (-1 + ηt) θl
      (320 η^3 θp + 6 × (2 + Φ1 + Φ2) × (-2 + θp (2 + Φ1 + Φ2)) +
        2 η (-34 - 9 Φ1 - 9 Φ2 + θp (124 + 60 Φ1 + 9 Φ1^2 + 60 Φ2 +
            18 Φ1 Φ2 + 9 Φ2^2)) + η^2 (-2 × (14 + 3 Φ1 + 3 Φ2) +
          9 θp (60 + Φ1^2 + 12 Φ2 + Φ2^2 + 2 Φ1 (6 + Φ2)))))))) +
2 cσ^2 f (-1 + η)^3 (-4 x^7 (-1 + η)^7 (-1 + η + θl - ηt θl) θp + 2 x^6 (-1 + η)^6
    (-2 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1 (2 + 5 × (-1 + w (-1 + η)) μ1) +
      θp (-4 - 10 η + 14 η^2 + 4 θl + 14 η θl - 4 ηt θl - 14 η ηt θl + 2 θl μ1 - 2 ηt
          θl μ1 + 2 θl μ2 - 2 ηt θl μ2 - 20 μ1 μ2 + 10 w^2 (-1 + η)^3 μ1 μ2 + 20 η
          μ1 μ2 + 10 θl μ1 μ2 - 10 ηt θl μ1 μ2 + θl μ1 Φ1 - ηt θl μ1 Φ1 + θl μ1
          Φ2 - ηt θl μ1 Φ2 - w (-1 + η) × (-6 × (1 + 5 μ1 μ2) + 6 η (1 + 5 μ1 μ2) -
            (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))))) +
  2 x^5 (-1 + η)^5 (-2 × (-1 + w (-1 + η)) × (-1 + ηt) θl μ1
      (-4 + 10 μ1 + 15 w^2 (-1 + η)^2 μ1 + 5 η (-2 + 5 μ1) - 2
        μ2 - w (-1 + η) × (25 × (1 + η) μ1 - 2 × (3 + μ2))) +
      θp (2 + 22 η + 18 η^2 - 42 η^3 - 2 θl - 24 η θl - 42 η^2 θl + 2 ηt θl + 24
          η ηt θl + 42 η^2 ηt θl + 4 ηt μ1 - 4 η ηt μ1 - 6 θl μ1 - 12 η θl
          μ1 + 6 ηt θl μ1 + 12 η ηt θl μ1 - 10 ηt μ1^2 + 10 η ηt μ1^2 - 2 θl
          μ1^2 + 2 ηt θl μ1^2 + 4 μ2 - 4 η μ2 - 6 θl μ2 - 12 η θl μ2 + 6 ηt θl
          μ2 + 12 η ηt θl μ2 + 44 μ1 μ2 + 30 w^3 (-1 + η)^4 μ1 μ2 + 76 η μ1
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μ2 - 120 η^2 μ1 μ2 - 26 θl μ1 μ2 - 60 η θl μ1 μ2 + 26 ηt θl μ1
μ2 + 60 η ηt θl μ1 μ2 + 2 μ2^2 - 2 η μ2^2 - 2 θl μ2^2 + 2 ηt θl μ2^2 - 3
θl μ1 Φ1 - 6 η θl μ1 Φ1 + 3 ηt θl μ1 Φ1 + 6 η ηt θl μ1 Φ1 - θl
μ1^2 Φ1 + ηt θl μ1^2 Φ1 - 2 θl μ1 μ2 Φ1 + 2 ηt θl μ1 μ2 Φ1 - 3
θl μ1 Φ2 - 6 η θl μ1 Φ2 + 3 ηt θl μ1 Φ2 + 6 η ηt θl μ1 Φ2 - θl
μ1^2 Φ2 + ηt θl μ1^2 Φ2 - 2 θl μ1 μ2 Φ2 + 2 ηt θl μ1 μ2 Φ2 - w^2
(-1 + η)^2 (60 η^2 μ1 μ2 + 2 × (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
  2 η (3 - 5 ηt μ1^2 + 22 μ1 μ2 + μ2^2) - (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) +
      3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) + 2
w (-1 + η) × (-6 - 2 ηt μ1 + 10 ηt μ1^2 - 2 μ2 - 59 μ1 μ2 - 2 μ2^2 +
  18 η^2 (1 + 5 μ1 μ2) - (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) +
      3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) +
  η (-12 + 2 ηt (1 - 5 μ1) μ1 + 2 μ2 - 31 μ1 μ2 + 2 μ2^2 -
      3 × (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))))))) -
x^4 (-1 + η)^4 (-4 × (-1 + η) θp (5 η + 30 η^2 + 35 η^3 + 4 ηt μ1 + 10 η ηt μ1 -
    10 ηt μ1^2 - 25 η ηt μ1^2 + 4 μ2 + 10 η μ2 + 14 μ1 μ2 + 15 w^4 (-1 + η)^4
    μ1 μ2 + 110 η μ1 μ2 + 150 η^2 μ1 μ2 + 2 ηt μ1 μ2 + 2 μ2^2 + 5 η μ2^2 - w^3
    (-1 + η)^3 (1 - 15 ηt μ1^2 + 3 × (22 + 25 η) μ1 μ2 + 3 μ2^2) + w^2 (-1 + η)^2
    (6 + 6 μ2 + 111 μ1 μ2 + 75 η^2 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2) +
      5 η (3 - 5 ηt μ1^2 + 52 μ1 μ2 + μ2^2)) - w (-1 + η) ×
    (3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2) + 45 η^2
        (1 + 5 μ1 μ2) + 5 η (6 + 2 ηt (1 - 5 μ1) μ1 + 2 μ2 + 59 μ1 μ2 + 2 μ2^2))) +
  (-1 + ηt) θl (-6 + 6 θp + 20 η θp + 120 η^2 θp + 140 η^3 θp - 20 μ1 - 64
    η μ1 - 80 η^2 μ1 + 24 θp μ1 + 60 η θp μ1 + 60 η^2 θp μ1 + 14 μ1^2 + 60
    w^4 (-1 + η)^4 μ1^2 + 160 η μ1^2 + 200 η^2 μ1^2 + 14 θp μ1^2 + 20 η
    θp μ1^2 - 12 μ2 + 24 θp μ2 + 60 η θp μ2 + 60 η^2 θp μ2 - 28 μ1
    μ2 - 32 η μ1 μ2 + 56 θp μ1 μ2 + 260 η θp μ1 μ2 + 300 η^2 θp μ1
    μ2 - 6 μ2^2 + 14 θp μ2^2 + 20 η θp μ2^2 + 3 θp Φ1 + 12 θp μ1 Φ1 + 30
    η θp μ1 Φ1 + 30 η^2 θp μ1 Φ1 + 7 θp μ1^2 Φ1 + 10 η θp μ1^2 Φ1 + 6
    θp μ2 Φ1 + 14 θp μ1 μ2 Φ1 + 20 η θp μ1 μ2 Φ1 + 3 θp μ2^2 Φ1 + 3
    θp Φ2 + 12 θp μ1 Φ2 + 30 η θp μ1 Φ2 + 30 η^2 θp μ1 Φ2 + 7 θp μ1^2
    Φ2 + 10 η θp μ1^2 Φ2 + 6 θp μ2 Φ2 + 14 θp μ1 μ2 Φ2 + 20 η θp μ1 μ2
    Φ2 + 3 θp μ2^2 Φ2 + w^2 (-1 + η)^2 (2 × ((147 + 320 η + 100 η^2) μ1^2 -
        9 (1 + μ2)^2 - 2 μ1 (21 + 13 μ2 + 8 η (3 + μ2))) +
      θp (42 + 72 μ2 + 34 μ2^2 + 9 Φ1 + 18 μ2 Φ1 + 9 μ2^2 Φ1 + 9 Φ2 +
        18 μ2 Φ2 + 9 μ2^2 Φ2 + 36 μ1 (2 + Φ1 + Φ2) + 17 μ1^2 (2 + Φ1 + Φ2) +
        2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2) + 10 η (2 × (3 + 3 μ2 + μ2^2) + 3 μ1
            (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)))) -
    w (-1 + η) × (2 × ((69 + 280 η + 200 η^2) μ1^2 - 9 (1 + μ2)^2 -
        2 μ1 (19 + 20 η^2 + 17 μ2 + 8 η (5 + 2 μ2))) +
      θp (30 + 76 μ2 + 38 μ2^2 + 9 Φ1 + 18 μ2 Φ1 + 9 μ2^2 Φ1 + 9 Φ2 +
        18 μ2 Φ2 + 9 μ2^2 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
        2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2) + 20 η (2 × (3 + 3 μ2 + μ2^2) +
            3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) +
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                30 η^2 (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))) - w^3
            (-1 + η)^3 (10 × (23 + 24 η) μ1^2 - 6 (1 + μ2)^2 - 4 μ1 (7 + 3 μ2) +
              θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))) -
x^2 (-1 + η)^2 (2 × (-1 + η) θp (-20 η^3 - 60 η^4 - 42 η^5 - 6 ηt - 9 η ηt - 12
          ηt μ1 - 30 η ηt μ1 - 48 η^2 ηt μ1 - 40 η^3 ηt μ1 - 6 ηt μ1^2 + 21 η
          ηt μ1^2 + 120 η^2 ηt μ1^2 + 100 η^3 ηt μ1^2 - 12 η μ2 - 48 η^2 μ2 - 40
          η^3 μ2 - 12 ηt μ2 - 18 η ηt μ2 - 12 η μ1 μ2 - 168 η^2 μ1 μ2 - 440 η^3
          μ1 μ2 - 300 η^4 μ1 μ2 - 16 ηt μ1 μ2 - 42 η ηt μ1 μ2 - 24 η^2 ηt μ1
          μ2 - 6 η μ2^2 - 24 η^2 μ2^2 - 20 η^3 μ2^2 - 6 ηt μ2^2 - 9 η ηt μ2^2 + 2 w^5
          (-1 + η)^5 (-5 ηt μ1^2 + μ2 ((7 + 15 η) μ1 + μ2)) + 6 w^4 (-1 + η)^4
          (ηt μ1 (3 × (4 + 5 η) μ1 + μ2) - μ2 ((7 + 36 η + 30 η^2) μ1 + 3 η μ2)) + w^3
          (-1 + η)^3 (2 + 8 μ2 + 56 μ1 μ2 + 300 η^3 μ1 μ2 - 6 μ2^2 + 12 η^2 (1 - 15 ηt μ1^2 +
                66 μ1 μ2 + 3 μ2^2) + 2 ηt (-66 μ1^2 + 3 (1 + μ2)^2 + 5 μ1 (2 + μ2)) +
            η (12 - 345 ηt μ1^2 + 6 × (4 + 83 μ1) μ2 + 42 μ2^2 + 9 ηt (1 + μ2)^2 +
                6 ηt μ1 (7 + 3 μ2))) - w^2 (-1 + η)^2 (150 η^4 μ1 μ2 +
            4 × (3 + 8 μ1 - μ2) μ2 - 20 η^3 (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
            12 η^2 (6 + 6 μ2 + 111 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2)) +
            2 ηt (-41 μ1^2 + 9 (1 + μ2)^2 + 3 μ1 (8 + 9 μ2)) + 3 η (6 + 8 × (3 + 20 μ1)
                μ2 + 12 μ2^2 + ηt (-147 μ1^2 + 9 (1 + μ2)^2 + μ1 (42 + 26 μ2)))) + w
          (-1 + η) × (4 × (1 + μ1) μ2 + 90 η^4 (1 + 5 μ1 μ2) - 20 η^3
              (-6 + 2 ηt μ1 (-1 + 5 μ1) - 2 μ2 - 59 μ1 μ2 - 2 μ2^2) +
            12 η^2 (3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2)) + ηt
              (-6 μ1^2 + 18 (1 + μ2)^2 + μ1 (40 + 54 μ2)) + η (6 μ2 (10 + 30 μ1 + 3 μ2) +
                3 ηt (-69 μ1^2 + 9 (1 + μ2)^2 + μ1 (38 + 34 μ2))))) -
        (-1 + ηt) θl (6 + 24 η + 18 η^2 - 6 θp - 36 η θp - 36 η^2 θp - 40 η^3 θp -
            120 η^4 θp - 84 η^5 θp + 12 μ1 + 48 η μ1 + 60 η^2 μ1 + 64 η^3 μ1 + 40
          η^4 μ1 - 12 θp μ1 - 84 η θp μ1 - 144 η^2 θp μ1 - 120 η^3 θp μ1 - 60
          η^4 θp μ1 + 6 μ1^2 + 24 η μ1^2 - 42 η^2 μ1^2 - 160 η^3 μ1^2 - 100 η^4
          μ1^2 - 6 θp μ1^2 - 48 η θp μ1^2 - 84 η^2 θp μ1^2 - 40 η^3 θp μ1^2 + 12
          μ2 + 48 η μ2 + 36 η^2 μ2 - 12 θp μ2 - 84 η θp μ2 - 144 η^2 θp
          μ2 - 120 η^3 θp μ2 - 60 η^4 θp μ2 + 12 μ1 μ2 + 64 η μ1 μ2 + 84
          η^2 μ1 μ2 + 32 η^3 μ1 μ2 - 12 θp μ1 μ2 - 108 η θp μ1 μ2 - 336
          η^2 θp μ1 μ2 - 520 η^3 θp μ1 μ2 - 300 η^4 θp μ1 μ2 + 6 μ2^2 + 24 η
          μ2^2 + 18 η^2 μ2^2 - 6 θp μ2^2 - 48 η θp μ2^2 - 84 η^2 θp μ2^2 - 40 η^3 θp
          μ2^2 + 4 w^5 (-1 + η)^5 μ1 ((7 + 10 η) μ1 + μ2) - 12 w^4 (-1 + η)^4
          μ1 ((7 + 24 η + 15 η^2) μ1 + 2 η μ2) - 3 θp Φ1 - 18 η θp Φ1 - 18
          η^2 θp Φ1 - 6 θp μ1 Φ1 - 42 η θp μ1 Φ1 - 72 η^2 θp μ1 Φ1 - 60 η^3
          θp μ1 Φ1 - 30 η^4 θp μ1 Φ1 - 3 θp μ1^2 Φ1 - 24 η θp μ1^2 Φ1 - 42
          η^2 θp μ1^2 Φ1 - 20 η^3 θp μ1^2 Φ1 - 6 θp μ2 Φ1 - 36 η θp μ2 Φ1 - 36
          η^2 θp μ2 Φ1 - 6 θp μ1 μ2 Φ1 - 48 η θp μ1 μ2 Φ1 - 84 η^2 θp μ1 μ2
          Φ1 - 40 η^3 θp μ1 μ2 Φ1 - 3 θp μ2^2 Φ1 - 18 η θp μ2^2 Φ1 - 18 η^2 θp
          μ2^2 Φ1 - 3 θp Φ2 - 18 η θp Φ2 - 18 η^2 θp Φ2 - 6 θp μ1 Φ2 - 42 η
          θp μ1 Φ2 - 72 η^2 θp μ1 Φ2 - 60 η^3 θp μ1 Φ2 - 30 η^4 θp μ1 Φ2 - 3
          θp μ1^2 Φ2 - 24 η θp μ1^2 Φ2 - 42 η^2 θp μ1^2 Φ2 - 20 η^3 θp μ1^2
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Φ2 - 6 θp μ2 Φ2 - 36 η θp μ2 Φ2 - 36 η^2 θp μ2 Φ2 - 6 θp μ1 μ2
Φ2 - 48 η θp μ1 μ2 Φ2 - 84 η^2 θp μ1 μ2 Φ2 - 40 η^3 θp μ1 μ2 Φ2 - 3
θp μ2^2 Φ2 - 18 η θp μ2^2 Φ2 - 18 η^2 θp μ2^2 Φ2 - w^2 (-1 + η)^2
(100 η^4 μ1^2 + 8 η (41 μ1^2 - 9 (1 + μ2)^2 - 3 μ1 (8 + 9 μ2)) +
  2 × (5 μ1^2 - 9 (1 + μ2)^2 - 2 μ1 (9 + 17 μ2)) + 6 η θp (24 + 9 Φ1 + 9 Φ2 +
      27 μ1 (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (3 + Φ1 + Φ2) +
      μ2^2 (28 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (53 + 14 Φ1 + 14 Φ2)) +
  θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) + 13 μ1^2 (2 + Φ1 + Φ2) +
      6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) +
      μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) + 4 η^3 (8 μ1 (-3 + 20 μ1 - μ2) +
      5 θp (2 × (3 + 3 μ2 + μ2^2) + 3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) +
          2 μ1 μ2 (13 + Φ1 + Φ2))) + 6 η^2 (-9 - 42 μ1 +
      147 μ1^2 - 18 μ2 - 26 μ1 μ2 - 9 μ2^2 + θp (42 + 9 Φ1 + 9 Φ2 +
          36 μ1 (2 + Φ1 + Φ2) + 17 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (4 + Φ1 + Φ2) +
          μ2^2 (34 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2)))) + w
(-1 + η) × (-6 × (3 μ1^2 + 3 (1 + μ2)^2 + μ1 (6 + 8 μ2)) +
  8 η (3 μ1^2 - 9 (1 + μ2)^2 - μ1 (20 + 27 μ2)) +
  10 η^4 (4 μ1 (-1 + 5 μ1) + 6 θp (3 + μ2) + 3 θp μ1 (2 + 10 μ2 + Φ1 + Φ2)) +
  6 η θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
      13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
      μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) +
  8 η^3 (2 μ1 (-10 + 35 μ1 - 4 μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
          3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
  6 η^2 (-9 - 38 μ1 + 69 μ1^2 - 18 μ2 - 34 μ1 μ2 - 9 μ2^2 + θp
        (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
          2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
          2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2)) + θp (11 μ1^2 (2 + Φ1 + Φ2) +
      (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
      μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2)))) + w^3
(-1 + η)^3 (78 μ1^2 + 240 η^3 μ1^2 - 6 (1 + μ2)^2 - 12 μ1 (1 + 3 μ2) +
  8 η (66 μ1^2 - 3 (1 + μ2)^2 - 5 μ1 (2 + μ2)) +
  θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
      2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
  6 η θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
      2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
  6 η^2 (115 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (7 + 3 μ2) + θp
        (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
          2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) +
2 x^3 (-1 + η)^3 ((-1 + η) θp (-20 η^2 - 80 η^3 - 70 η^4 - 3 ηt - 10 ηt μ1 - 32
      η ηt μ1 - 40 η^2 ηt μ1 + 7 ηt μ1^2 + 80 η ηt μ1^2 + 100 η^2 ηt μ1^2 - 4
      μ2 - 32 η μ2 - 40 η^2 μ2 - 6 ηt μ2 - 4 μ1 μ2 + 10 w^5 (-1 + η)^5
      μ1 μ2 - 112 η μ1 μ2 - 440 η^2 μ1 μ2 - 400 η^3 μ1 μ2 - 14 ηt μ1
      μ2 - 16 η ηt μ1 μ2 - 2 μ2^2 - 16 η μ2^2 - 20 η^2 μ2^2 - 3 ηt μ2^2 - 6 w^4
      (-1 + η)^4 (-5 ηt μ1^2 + μ2 (4 × (3 + 5 η) μ1 + μ2)) + w^3 (-1 + η)^3
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(4 - 115 ηt μ1^2 + 300 η^2 μ1 μ2 + 2 × (4 + 83 μ1) μ2 + 14 μ2^2 + 3 ηt (1 + μ2)^2 +
   2 ηt μ1 (7 + 3 μ2) + 8 η (1 - 15 ηt μ1^2 + 66 μ1 μ2 + 3 μ2^2)) - w^2
(-1 + η)^2 (6 + 200 η^3 μ1 μ2 + 8 × (3 + 20 μ1) μ2 + 12 μ2^2 -
   20 η^2 (-3 + 5 ηt μ1^2 - 52 μ1 μ2 - μ2^2) +
   8 η (6 + 6 μ2 + 111 μ1 μ2 + 8 μ2^2 + 2 ηt μ1 (3 - 20 μ1 + μ2)) +
   ηt (-147 μ1^2 + 9 (1 + μ2)^2 + μ1 (42 + 26 μ2))) + w
(-1 + η) × (2 μ2 (10 + 30 μ1 + 3 μ2) + 120 η^3 (1 + 5 μ1 μ2) -
   20 η^2 (-6 + 2 ηt μ1 (-1 + 5 μ1) - 2 μ2 - 59 μ1 μ2 - 2 μ2^2) +
   8 η (3 + 10 μ2 + 74 μ1 μ2 + 7 μ2^2 + ηt μ1 (10 - 35 μ1 + 4 μ2)) +
   ηt (-69 μ1^2 + 9 (1 + μ2)^2 + μ1 (38 + 34 μ2)))) -
(-1 + ηt) θl (6 + 9 η - 6 θp - 12 η θp - 20 η^2 θp - 80 η^3 θp - 70 η^4
   θp + 12 μ1 + 30 η μ1 + 48 η^2 μ1 + 40 η^3 μ1 - 14 θp μ1 - 48 η
   θp μ1 - 60 η^2 θp μ1 - 40 η^3 θp μ1 + 6 μ1^2 + 10 w^5 (-1 + η)^5
   μ1^2 - 21 η μ1^2 - 120 η^2 μ1^2 - 100 η^3 μ1^2 - 8 θp μ1^2 - 28 η
   θp μ1^2 - 20 η^2 θp μ1^2 + 12 μ2 + 18 η μ2 - 14 θp μ2 - 48 η θp
   μ2 - 60 η^2 θp μ2 - 40 η^3 θp μ2 + 16 μ1 μ2 + 42 η μ1 μ2 + 24 η^2
   μ1 μ2 - 18 θp μ1 μ2 - 112 η θp μ1 μ2 - 260 η^2 θp μ1 μ2 - 200
   η^3 θp μ1 μ2 + 6 μ2^2 + 9 η μ2^2 - 8 θp μ2^2 - 28 η θp μ2^2 - 20 η^2 θp
   μ2^2 - 6 w^4 (-1 + η)^4 μ1 (3 × (4 + 5 η) μ1 + μ2) - 3 θp Φ1 - 6 η
   θp Φ1 - 7 θp μ1 Φ1 - 24 η θp μ1 Φ1 - 30 η^2 θp μ1 Φ1 - 20 η^3 θp
   μ1 Φ1 - 4 θp μ1^2 Φ1 - 14 η θp μ1^2 Φ1 - 10 η^2 θp μ1^2 Φ1 - 6 θp
   μ2 Φ1 - 12 η θp μ2 Φ1 - 8 θp μ1 μ2 Φ1 - 28 η θp μ1 μ2 Φ1 - 20
   η^2 θp μ1 μ2 Φ1 - 3 θp μ2^2 Φ1 - 6 η θp μ2^2 Φ1 - 3 θp Φ2 - 6 η
   θp Φ2 - 7 θp μ1 Φ2 - 24 η θp μ1 Φ2 - 30 η^2 θp μ1 Φ2 - 20 η^3 θp
   μ1 Φ2 - 4 θp μ1^2 Φ2 - 14 η θp μ1^2 Φ2 - 10 η^2 θp μ1^2 Φ2 - 6 θp
   μ2 Φ2 - 12 η θp μ2 Φ2 - 8 θp μ1 μ2 Φ2 - 28 η θp μ1 μ2 Φ2 - 20
   η^2 θp μ1 μ2 Φ2 - 3 θp μ2^2 Φ2 - 6 η θp μ2^2 Φ2 - w^2 (-1 + η)^2
   (82 μ1^2 + 100 η^3 μ1^2 - 18 (1 + μ2)^2 - 6 μ1 (8 + 9 μ2) + θp (24 + 9 Φ1 + 9 Φ2 +
         27 μ1 (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (3 + Φ1 + Φ2) +
         μ2^2 (28 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (53 + 14 Φ1 + 14 Φ2)) +
      2 η^2 (12 μ1 (-3 + 20 μ1 - μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
            3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
      η (441 μ1^2 - 27 (1 + μ2)^2 - 6 μ1 (21 + 13 μ2) + 2 θp (42 + 9 Φ1 + 9 Φ2 +
            36 μ1 (2 + Φ1 + Φ2) + 17 μ1^2 (2 + Φ1 + Φ2) + 18 μ2 (4 + Φ1 + Φ2) +
            μ2^2 (34 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (92 + 17 Φ1 + 17 Φ2)))) + w
   (-1 + η) × (6 μ1^2 - 18 (1 + μ2)^2 - 2 μ1 (20 + 27 μ2) + 20 η^3
         (2 μ1 (-1 + 5 μ1) + 2 θp (3 + μ2) + θp μ1 (2 + 10 μ2 + Φ1 + Φ2)) +
      θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
         13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
         μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) +
      4 η^2 (3 μ1 (-10 + 35 μ1 - 4 μ2) + 5 θp (2 × (3 + 3 μ2 + μ2^2) +
            3 μ1 (2 + Φ1 + Φ2) + μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) +
      η (3 × (69 μ1^2 - 9 (1 + μ2)^2 - 2 μ1 (19 + 17 μ2)) + 2 θp
            (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
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                2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
                2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2)))) + w^3
        (-1 + η)^3 (132 μ1^2 + 180 η^2 μ1^2 - 6 (1 + μ2)^2 - 10 μ1 (2 + μ2) +
          5 θp μ1^2 (2 + Φ1 + Φ2) + θp (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
          2 θp μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)) +
          η (345 μ1^2 - 9 (1 + μ2)^2 - 6 μ1 (7 + 3 μ2) +
            2 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
              2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) -
    θp (4 w^5 (-1 + η)^6 (-η t μ1 + η μ2) (5 η^2 μ1 - μ2 + η (7 μ1 + μ2)) -
      12 w^4 (-1 + η)^5 (1 + η) (-η t μ1 + η μ2) (5 η^2 μ1 - μ2 + η (7 μ1 + μ2)) -
      η (1 + η)^2 (4 η^5 - 6 η t (1 + μ1 + μ2)^2 + η^4 (-4 - 4 × (-1 + η t) θl + 40 μ1 μ2) + η
          (3 θl (1 + μ1 + μ2)^2 (2 + Φ1 + Φ2) + η t (6 μ1^2 + 6 (1 + μ2)^2 +
              4 μ1 (3 + μ2) - 3 θl (1 + μ1 + μ2)^2 (2 + Φ1 + Φ2))) + 2
          η^3 (2 θl μ2 + 2 μ2 (2 - 8 μ1 + μ2) + θl μ1 (2 + 10 μ2 + Φ1 + Φ2) -
            η t (10 μ1^2 + 2 θl μ2 + μ1 (-4 + θl (2 + 10 μ2 + Φ1 + Φ2)))) - 2
          η^2 (2 μ2 (2 + 2 μ1 + μ2) - θl (2 μ2 (1 + μ2) + μ1^2 (2 + Φ1 + Φ2) +
              μ1 (2 + Φ1 + Φ2 + 2 μ2 (3 + Φ1 + Φ2))) +
            η t (2 θl μ2 (1 + μ2) + μ1^2 (-10 + θl (2 + Φ1 + Φ2)) +
              μ1 (4 - 4 μ2 + θl (2 + Φ1 + Φ2 + 2 μ2 (3 + Φ1 + Φ2))))))) +
      w^3 (-1 + η)^3 (60 η^6 μ1 μ2 - 12 η t μ1 μ2 + η^5 (4 - 60 η t μ1^2 + 204 μ1 μ2 +
            12 μ2^2) + 6 η (2 μ2^2 + η t (13 μ1^2 - (1 + μ2)^2 - 2 μ1 (1 + 2 μ2))) - η^2
          (4 + 16 × (1 + 7 μ1) μ2 - θl (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 +
                3 Φ1 + 3 Φ2) + 2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
            η t (-186 μ1^2 + 6 (1 + μ2)^2 - 4 μ1 (-7 + 4 μ2) + 5 θl μ1^2
                (2 + Φ1 + Φ2) + θl (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
              2 θl μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) - 2 η^3
          (2 + 110 μ1 μ2 + 20 μ2^2 - θl (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 +
                3 Φ1 + 3 Φ2) + 2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))) +
            η t (17 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (3 + 2 μ2) + θl (5 μ1^2
                (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))) +
        η^4 (4 + 4 × (4 + 17 μ1) μ2 + 16 μ2^2 + 5 θl μ1^2 (2 + Φ1 + Φ2) +
            θl (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) + 2 θl μ1 (5 × (2 + Φ1 + Φ2) +
              μ2 (22 + 5 Φ1 + 5 Φ2)) - η t (170 μ1^2 - 6 (1 + μ2)^2 - 4 μ1 (7 + 3 μ2) +
              θl (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))) -
      w^2 (-1 + η)^2 (1 + η) × (20 η^6 μ1 μ2 - 4 η t μ1 μ2 + 4 η^5 (3 - 5 η t μ1^2 +
            42 μ1 μ2 + μ2^2) + 2 η (2 μ2^2 + η t (5 μ1^2 - 9 (1 + μ2)^2 - 6 μ1 (3 + 5 μ2))) -
        2 η^4 (4 η t μ1 (-3 + 15 μ1 - μ2) - 2 μ2 (6 + 17 μ1 + 6 μ2) +
            (-1 + η t) θl (2 × (3 + 3 μ2 + μ2^2) + 3 μ1 (2 + Φ1 + Φ2) +
              μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2))) + η^2
          (-8 × (3 + 8 μ1) μ2 + 4 η t μ1 (-6 + 36 μ1 + 5 μ2) - (-1 + η t) θl
              (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) + 13 μ1^2 (2 + Φ1 + Φ2) +
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                6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) +
                μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) ) + η^3 (-4 × (3 + 48 μ1 μ2 + 8 μ2^2) +
            3 θl (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)) ) -
            ηt (2 × (7 μ1^2 - 18 μ1 (1 + μ2) - 9 (1 + μ2)^2) + 3 θl
                (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                    2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)) ) ) ) ) ) + w (-1 + η)
        η (12 η^6 (1 + 5 μ1 μ2) - 6 ηt (3 μ1^2 + 3 (1 + μ2)^2 + μ1 (6 + 8 μ2)) -
            4 η^4 (3 - 8 ηt μ1 + 25 ηt μ1^2 - 8 μ2 - 15 μ1 μ2 - 4 ηt μ1 μ2 - 5 μ2^2 +
                (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) + 3 μ1 (2 + Φ1 + Φ2) +
                    μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)) ) - 2
            η^5 (4 ηt μ1 (-1 + 5 μ1) - 2 × (3 + 2 μ2 + 44 μ1 μ2 + 2 μ2^2) +
                (-1 + ηt) θl (2 × (3 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2)) ) + η^3
            (-4 × (3 + 44 μ1 μ2 + 4 μ2^2) + 2 ηt (μ1^2 + 9 (1 + μ2)^2 + 2 μ1 (9 + 13 μ2)) +
                θl (30 + 9 Φ1 + 9 Φ2 + 38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) +
                    2 μ2 (38 + 9 Φ1 + 9 Φ2) + μ2^2 (38 + 9 Φ1 + 9 Φ2) +
                    2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2)) - ηt θl (30 + 9 Φ1 + 9 Φ2 +
                    38 μ1 (2 + Φ1 + Φ2) + 19 μ1^2 (2 + Φ1 + Φ2) + 2 μ2 (38 + 9 Φ1 + 9 Φ2) +
                    μ2^2 (38 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (98 + 19 Φ1 + 19 Φ2)) ) - 2 η^2
            (2 μ2 (8 + 28 μ1 + 3 μ2) - θl (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
                    13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) +
                    μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) + ηt (-9 - 2 μ1 - 63 μ1^2 - 18 μ2 -
                    20 μ1 μ2 - 9 μ2^2 + θl (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) +
                        13 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) +
                        μ2^2 (26 + 9 Φ1 + 9 Φ2) + μ1 μ2 (80 + 26 Φ1 + 26 Φ2)) ) ) - η
            (8 × (1 + μ1) μ2 - θl (11 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2) ×
                    (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                    μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2)) ) +
                ηt (-30 μ1^2 + 18 (1 + μ2)^2 + μ1 (44 + 60 μ2) + θl (11 μ1^2 (2 + Φ1 + Φ2) +
                        (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                        μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2)) ) ) ) ) ) +
    2 x (-1 + η) × (30 × (-2 + w) (-1 + w)^2 w^2 η^8 θp μ1 μ2 - (1 + w)^3
        (2 w^2 ηt θl μ1 μ2 + 2 w^2 μ2 (-θl μ1 + θp μ2) + ηt θp
            ((-3 + 14 w^2) μ1^2 - 3 (1 + μ2)^2 + 2 μ1 (-3 + (-3 - 3 w + w^2) μ2)) ) -
        2 × (-1 + w) η^7 (5 (-1 + w)^2 w^2 (-1 + ηt) θl μ1^2 + θp
            (-7 + w (11 + 90 μ1 μ2) + w^2 (-4 + 25 ηt μ1^2 - 80 μ1 μ2 - 5 μ2^2) +
                2 w^4 (5 ηt μ1^2 + 38 μ1 μ2 - μ2^2) + w^3 (-35 ηt μ1^2 - 116 μ1 μ2 + 7 μ2^2)) ) -
        η^2 (θp (-6 μ2 (2 + 2 μ1 + μ2) + ηt (33 μ1^2 + 3 (1 + μ2)^2 - 2 μ1 (3 + 5 μ2)) -
                6 w^4 (5 ηt μ1 (7 μ1 + 2 μ2) - μ2 (34 μ1 + 7 μ2)) +
                6 w^5 (5 ηt μ1 (3 μ1 + μ2) + μ2 (23 μ1 + 9 μ2)) + w^3 (4 + 40 μ2 - 50 μ1 μ2 -
                    54 μ2^2 + ηt (-477 μ1^2 + μ1 (82 - 46 μ2) + 21 (1 + μ2)^2)) -
                18 w^2 (1 + 16 μ1 μ2 + 3 μ2^2 + ηt (2 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (3 + 4 μ2)) ) +
                2 w (-μ2 (22 + 82 μ1 + 9 μ2) + ηt (87 μ1^2 + 18 (1 + μ2)^2 +
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            μ1 (14 + 45 μ2)))) + (-1 + ηt) θl (6 μ1^2 + 6 (1 + μ2)^2 +
        30 w^5 μ1 (2 μ1 + μ2) + 4 μ1 (3 + 4 μ2) + 6 w^4 μ1 (16 μ1 + 5 μ2) -
        w^3 (15 μ1^2 + 3 (1 + μ2)^2 + μ1 (-2 + 26 μ2)) - 3 θp (4 μ1^2 (2 + Φ1 + Φ2) +
            (1 + μ2) × (3 × (2 + Φ1 + Φ2) + μ2 (8 + 3 Φ1 + 3 Φ2)) +
            μ1 (7 × (2 + Φ1 + Φ2) + 2 μ2 (9 + 4 Φ1 + 4 Φ2))) - w (-9 - 22 μ1 +
            15 μ1^2 - 18 μ2 - 30 μ1 μ2 - 9 μ2^2 + 2 θp (9 × (2 + Φ1 + Φ2) + 26 μ1
                (2 + Φ1 + Φ2) + 14 μ1^2 (2 + Φ1 + Φ2) + 4 μ1 μ2 (24 + 7 Φ1 + 7 Φ2) +
                2 μ2 (26 + 9 Φ1 + 9 Φ2) + μ2^2 (28 + 9 Φ1 + 9 Φ2))) -
        w^2 (12 μ1 (-1 + 6 μ1 + μ2) + θp (33 μ1 (2 + Φ1 + Φ2) + 16 μ1^2
                (2 + Φ1 + Φ2) + 9 × (4 + Φ1 + Φ2) + 6 μ2 (11 + 3 Φ1 + 3 Φ2) +
                μ2^2 (32 + 9 Φ1 + 9 Φ2) + 2 μ1 μ2 (79 + 16 Φ1 + 16 Φ2))))) +
    η^6 (2 θp (-5 + 7 × (-1 + ηt) θl - 60 μ1 μ2) - 6 w^4 (ηt θp μ1 (51 μ1 - 2 μ2) +
        (-1 + ηt) θl μ1 (8 μ1 - μ2) + θp (34 μ1 - 15 μ2) μ2) + 2
      w^5 ((-1 + ηt) θl μ1 (18 μ1 - μ2) + ηt θp μ1 (53 μ1 - μ2) +
        θp (141 μ1 - 13 μ2) μ2) + w^2 (4 × (-1 + ηt) θl μ1 (-3 + 15 μ1 - μ2) +
        θp (42 - 48 μ2 + 492 μ1 μ2 - 34 μ2^2 + 2 ηt μ1 (85 μ1 - 8 × (3 + μ2)) +
            5 × (-1 + ηt) θl (2 × (3 + 3 μ2 + μ2^2) + 3 μ1 (2 + Φ1 + Φ2) +
                μ1^2 (2 + Φ1 + Φ2) + 2 μ1 μ2 (13 + Φ1 + Φ2)))) - 2 w
      (2 × (-1 + ηt) θl μ1 (-1 + 5 μ1) + θp (6 + 10 ηt μ1 (-1 + 5 μ1) -
            10 μ2 - 115 μ1 μ2 - 10 μ2^2 + 3 × (-1 + ηt) θl (2 × (3 + μ2) +
                μ1 (2 + 10 μ2 + Φ1 + Φ2)))) + w^3 (θp (-20 + (24 - 714 μ1) μ2 -
            54 μ2^2 + 3 ηt (45 μ1^2 + 3 (1 + μ2)^2 + 2 μ1 (7 + 3 μ2))) -
        (-1 + ηt) θl (25 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (7 + 3 μ2) +
            2 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))))) +
    η^3 (-θp (-10 μ2 (2 + 10 μ1 + μ2) + 30 w^4 (μ2 (4 μ1 + μ2) + ηt μ1
                (19 μ1 + 4 μ2)) + 20 w^5 (ηt μ1 (μ1 - 2 μ2) - μ2 (12 μ1 + 5 μ2)) +
        ηt (59 μ1^2 + 9 (1 + μ2)^2 + μ1 (-2 + 26 μ2)) + 8 w^3
          (2 + 99 μ1 μ2 + 24 μ2^2 + 3 ηt (7 μ1^2 + μ1 (-2 + μ2) - (1 + μ2)^2)) -
        6 w^2 (-1 - 4 × (4 + 15 μ1) μ2 - 11 μ2^2 + ηt (86 μ1^2 + 3 (1 + μ2)^2 +
                2 μ1 (-5 + 6 μ2))) + w (-4 × (6 + (-8 + 60 μ1) μ2 + 5 μ2^2) +
            2 ηt (-61 μ1^2 + 9 (1 + μ2)^2 + μ1 (34 + 32 μ2)))) +
      (-1 + ηt) θl (-3 - 10 μ1 + 7 μ1^2 - 6 w^4 μ1^2 - 6 μ2 - 14 μ1 μ2 -
        3 μ2^2 + 10 w^5 μ1 (9 μ1 + 4 μ2) + 2 θp (3 × (2 + Φ1 + Φ2) +
            7 μ1^2 (2 + Φ1 + Φ2) + 6 μ2 (4 + Φ1 + Φ2) + μ2^2 (14 + 3 Φ1 + 3 Φ2) +
            2 μ1 (6 × (2 + Φ1 + Φ2) + 7 μ2 (4 + Φ1 + Φ2))) -
        w (-9 - 2 μ1 - 63 μ1^2 - 18 μ2 - 20 μ1 μ2 - 9 μ2^2 + θp
                (-6 + 9 Φ1 + 9 Φ2 + 2 μ1 μ2 (-76 + Φ1 + Φ2) - 4 μ1 (2 + Φ1 + Φ2) + μ1^2
                    (2 + Φ1 + Φ2) + 2 μ2 (-4 + 9 Φ1 + 9 Φ2) + μ2^2 (2 + 9 Φ1 + 9 Φ2))) -
        w^2 (6 × (2 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (3 + 4 μ2)) + θp
                (66 μ1 (2 + Φ1 + Φ2) + 37 μ1^2 (2 + Φ1 + Φ2) +
                    3 × (14 + 9 Φ1 + 9 Φ2) + 6 μ2 (22 + 9 Φ1 + 9 Φ2) +
                    μ2^2 (74 + 27 Φ1 + 27 Φ2) + 2 μ1 μ2 (94 + 37 Φ1 + 37 Φ2))) -
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        2 w^3 (82 μ1^2 - 3 (1 + μ2)^2 + 2 μ1 (-7 + 6 μ2) + 2 θp
              (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)))))) -
η^5 (6 w^5 ((-1 + ηt) θl μ1 (5 μ1 - 2 μ2) + 2 ηt θp μ1 (18 μ1 - μ2) +
        6 θp (5 μ1 - 2 μ2) μ2) + 6 w^4
      ((-1 + ηt) θl μ1 (11 μ1 + 4 μ2) + ηt θp μ1 (-37 μ1 + 10 μ2) +
        θp μ2 (90 μ1 + 29 μ2)) - 2 ((-1 + ηt) θl μ1 (-2 + 5 μ1) +
        θp (7 + 5 ηt μ1 (-2 + 5 μ1) - 10 μ2 - 50 μ1 μ2 - 5 μ2^2 +
            3 × (-1 + ηt) θl (2 × (2 + μ2) + μ1 (2 + 10 μ2 + Φ1 + Φ2))) - 3
      w^2 (θp (6 × (2 + (4 + 38 μ1) μ2 + 7 μ2^2) - ηt (123 μ1^2 +
                9 (1 + μ2)^2 + 2 μ1 (-3 + 5 μ2))) + (-1 + ηt) θl
          (-μ1^2 - 6 μ1 (1 + μ2) - 3 (1 + μ2)^2 + 2 θp (4 + 3 Φ1 + 3 Φ2 +
                7 μ1 (2 + Φ1 + Φ2) + 4 μ1^2 (2 + Φ1 + Φ2) + 2 μ2 (7 + 3 Φ1 + 3 Φ2) +
                μ2^2 (8 + 3 Φ1 + 3 Φ2) + 2 μ1 μ2 (9 + 4 Φ1 + 4 Φ2))) + 2
      w ((-1 + ηt) θl μ1 (25 μ1 - 4 × (2 + μ2)) + θp (30 - 20 ηt μ1 +
            40 ηt μ1^2 - 20 μ2 + 204 μ1 μ2 - 16 ηt μ1 μ2 - 8 μ2^2 +
            (-1 + ηt) θl (2 × (6 + 12 μ2 + 5 μ2^2) + 5 μ1^2 (2 + Φ1 + Φ2) +
                2 μ1 (6 × (2 + Φ1 + Φ2) + 5 μ2 (10 + Φ1 + Φ2)))) +
    w^3 (4 θp (-1 - 4 × (-5 + 43 μ1) μ2 + 9 μ2^2 + ηt (-99 μ1^2 +
                6 (1 + μ2)^2 + μ1 (32 + 13 μ2))) -
        (-1 + ηt) θl (123 μ1^2 - 3 (1 + μ2)^2 - 2 μ1 (11 + 4 μ2) +
            3 θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2))))) +
η (θp (4 w^3 (1 + ηt μ1 (4 - 27 μ1 - 13 μ2) + 4 μ2 + 28 μ1 μ2 + 3 μ2^2) +
        4 w^5 (ηt μ1 (16 μ1 + 3 μ2) + μ2 (7 μ1 + 4 μ2)) +
        6 w^4 (ηt μ1 (11 μ1 - 2 μ2) + μ2 (14 μ1 + 5 μ2)) +
        ηt (9 μ1^2 + 9 (1 + μ2)^2 + 2 μ1 (9 + 13 μ2)) + w^2 (2 × (12 + 32 μ1 - μ2) μ2 +
            ηt (-149 μ1^2 + 9 (1 + μ2)^2 + 6 μ1 (7 + μ2))) +
        w (8 × (1 + μ1) μ2 + ηt (-30 μ1^2 + 18 (1 + μ2)^2 + μ1 (44 + 60 μ2)))) +
    (-1 + ηt) θl (6 w^4 μ1 (7 μ1 + 4 μ2) + 2 w^5 μ1 (7 μ1 + 6 μ2) +
        3 (1 + μ1 + μ2)^2 (-1 + θp (2 + Φ1 + Φ2)) + w^2 (-9 - 18 μ1 + 5 μ1^2 - 18 μ2 -
            30 μ1 μ2 - 9 μ2^2 + θp (9 × (2 + Φ1 + Φ2) + 24 μ1 (2 + Φ1 + Φ2) + 13 μ1^2
                (2 + Φ1 + Φ2) + 6 μ2 (8 + 3 Φ1 + 3 Φ2) + μ2^2 (26 + 9 Φ1 + 9 Φ2) +
                μ1 μ2 (80 + 26 Φ1 + 26 Φ2))) + w^3 (-6 μ1 + 39 μ1^2 - 3 (1 + μ2)^2 +
            θp (5 μ1^2 (2 + Φ1 + Φ2) + (1 + μ2)^2 (10 + 3 Φ1 + 3 Φ2) +
                2 μ1 (5 × (2 + Φ1 + Φ2) + μ2 (22 + 5 Φ1 + 5 Φ2)))) +
        w (-3 × (3 μ1^2 + 3 (1 + μ2)^2 + μ1 (6 + 8 μ2)) + θp (11 μ1^2 (2 + Φ1 + Φ2) +
                (1 + μ2) × (9 × (2 + Φ1 + Φ2) + μ2 (22 + 9 Φ1 + 9 Φ2)) +
                μ1 (20 × (2 + Φ1 + Φ2) + μ2 (48 + 22 Φ1 + 22 Φ2))))) +
η^4 (10 θp - 10 θl θp + 10 ηt θl θp + 8 θl μ1 - 8 ηt θl μ1 - 12 ηt θp
    μ1 - 30 θl θp μ1 + 30 ηt θl θp μ1 - 20 θl μ1^2 + 20 ηt θl
    μ1^2 + 30 ηt θp μ1^2 - 10 θl θp μ1^2 + 10 ηt θl θp μ1^2 - 12 θp
    μ2 - 30 θl θp μ2 + 30 ηt θl θp μ2 + 4 θl μ1 μ2 - 4 ηt θl μ1
```

$$
\begin{aligned}
&\mu 2 + 108\,\theta p\,\mu 1\,\mu 2 - 16\,\eta t\,\theta p\,\mu 1\,\mu 2 - 130\,\theta l\,\theta p\,\mu 1\,\mu 2 + 130\\
&\eta t\,\theta l\,\theta p\,\mu 1\,\mu 2 - 6\,\theta p\,\mu 2^2 - 10\,\theta l\,\theta p\,\mu 2^2 + 10\,\eta t\,\theta l\,\theta p\\
&\mu 2^2 - 10\,w^5\,(11\,\theta p\,\mu 2\,(\mu 1 + \mu 2) + \eta t\,\theta p\,\mu 1\,(-19\,\mu 1 + 3\,\mu 2) +\\
&\quad (-1 + \eta t)\,\theta l\,\mu 1\,(4\,\mu 1 + 3\,\mu 2)) + 6\,w^4\,((-1 + \eta t)\,\theta l\,\mu 1\,(24\,\mu 1 + 5\,\mu 2) +\\
&\quad 5\,\theta p\,(\eta t\,\mu 1\,(11\,\mu 1 + 4\,\mu 2) + \mu 2\,(24\,\mu 1 + 5\,\mu 2))) - 15\\
&\theta l\,\theta p\,\mu 1\,\Phi 1 + 15\,\eta t\,\theta l\,\theta p\,\mu 1\,\Phi 1 - 5\,\theta l\,\theta p\,\mu 1^2\,\Phi 1 + 5\,\eta t\,\theta l\\
&\theta p\,\mu 1^2\,\Phi 1 - 10\,\theta l\,\theta p\,\mu 1\,\mu 2\,\Phi 1 + 10\,\eta t\,\theta l\,\theta p\,\mu 1\,\mu 2\\
&\Phi 1 - 15\,\theta l\,\theta p\,\mu 1\,\Phi 2 + 15\,\eta t\,\theta l\,\theta p\,\mu 1\,\Phi 2 - 5\,\theta l\,\theta p\,\mu 1^2\\
&\Phi 2 + 5\,\eta t\,\theta l\,\theta p\,\mu 1^2\,\Phi 2 - 10\,\theta l\,\theta p\,\mu 1\,\mu 2\,\Phi 2 + 10\,\eta t\,\theta l\\
&\theta p\,\mu 1\,\mu 2\,\Phi 2 + w^3\,\big(\theta p\,\big(24 + (80 + 578\,\mu 1)\,\mu 2 + 198\,\mu 2^2 +\\
&\qquad \eta t\,\big(-573\,\mu 1^2 + 9\,(1 + \mu 2)^2 + \mu 1\,(98 + 46\,\mu 2)\big)\big) +\\
&\quad 2 \times (-1 + \eta t)\,\theta l\,\big(21\,\mu 1^2 + 3\,\mu 1\,(-2 + \mu 2) - 3\,(1 + \mu 2)^2 +\\
&\qquad 5\,\theta p\,\mu 1^2\,(2 + \Phi 1 + \Phi 2) + \theta p\,(1 + \mu 2)^2\,(10 + 3\,\Phi 1 + 3\,\Phi 2) +\\
&\qquad 2\,\theta p\,\mu 1\,(5 \times (2 + \Phi 1 + \Phi 2) + \mu 2\,(22 + 5\,\Phi 1 + 5\,\Phi 2))\big)\big) + w\\
&\big(\theta p\,\big(12 + 253\,\eta t\,\mu 1^2 - 2 \times (40 + 207\,\mu 1)\,\mu 2 - 74\,\mu 2^2 + 27\,\eta t\,(1 + \mu 2)^2 +\\
&\qquad \eta t\,\mu 1\,(-26 + 38\,\mu 2)\big) - (-1 + \eta t)\,\theta l\,\big(-9 + 18\,\theta p\,(\Phi 1 + \Phi 2) +\\
&\qquad \mu 1^2\,(-1 + 28\,\theta p\,(2 + \Phi 1 + \Phi 2)) + 2\,\mu 2\,(-9 + 2\,\theta p\,(23 + 9\,\Phi 1 + 9\,\Phi 2)) +\\
&\qquad \mu 2^2\,(-9 + 2\,\theta p\,(28 + 9\,\Phi 1 + 9\,\Phi 2)) + 2\,\mu 1\\
&\qquad\quad (-9 - 13\,\mu 2 + 23\,\theta p\,(2 + \Phi 1 + \Phi 2) + \theta p\,\mu 2\,(66 + 28\,\Phi 1 + 28\,\Phi 2))\big)\big) -\\
&\quad 3\,w^2\,\big(2 \times (-1 + \eta t)\,\theta l\,\mu 1\,(-4 + 22\,\mu 1 + \mu 2) + \theta p\,\big(20 - 16\,\mu 2 +\\
&\qquad 256\,\mu 1\,\mu 2 + 22\,\mu 2^2 - \theta l\,\big(22 + 3\,\Phi 1 + 3\,\Phi 2 + 7\,\mu 1^2\,(2 + \Phi 1 + \Phi 2) +\\
&\qquad\quad \mu 2^2\,(14 + 3\,\Phi 1 + 3\,\Phi 2) + \mu 2\,(32 + 6\,\Phi 1 + 6\,\Phi 2) +\\
&\qquad\quad 2\,\mu 1\,(8 \times (2 + \Phi 1 + \Phi 2) + \mu 2\,(48 + 7\,\Phi 1 + 7\,\Phi 2))\big) + \eta t\,\big(83\,\mu 1^2 -\\
&\qquad\quad 15\,(1 + \mu 2)^2 - 2\,\mu 1\,(23 + 13\,\mu 2) + \theta l\,\big(22 + 3\,\Phi 1 + 3\,\Phi 2 + 7\,\mu 1^2\,(2 +\\
&\qquad\qquad \Phi 1 + \Phi 2) + \mu 2^2\,(14 + 3\,\Phi 1 + 3\,\Phi 2) + \mu 2\,(32 + 6\,\Phi 1 + 6\,\Phi 2) +\\
&\qquad\qquad 2\,\mu 1\,(8 \times (2 + \Phi 1 + \Phi 2) + \mu 2\,(48 + 7\,\Phi 1 + 7\,\Phi 2))\big)\big)\big)\big)\big)\big)\big)\big)\big) \Big/
\end{aligned}
$$

$$
\begin{aligned}
&\big(32\,u\,(-1 + w\,(-1 + \eta))^3\,(x + \eta - x\,\eta)^2\,(1 + x + \eta - x\,\eta)^2\\
&\quad (w +\\
&\qquad x +\\
&\qquad \eta -\\
&\qquad w\,\eta -\\
&\qquad x\,\eta)^3\,(-1 + \eta t)\,\theta p\big)\big)
\end{aligned}
$$

$$
\begin{aligned}
\delta K = &-\frac{17\,u}{2} - \big(f\,(-1 + \eta) \times\\
&\big(-3\,x^2\,(-1 + \eta)^2\,(-1 + \eta + \theta l - \eta t\,\theta l)\,\theta p + \theta p\,\big(-3\,\eta^3 + 2\,\eta t + 3\,\eta^2\,(1 + (-1 + \eta t)\,\theta l) +\\
&\qquad \eta\,(-\theta l\,(2 + \Phi 1 + \Phi 2) + \eta t\,(-2 + \theta l\,(2 + \Phi 1 + \Phi 2))) + w\,(-1 + \eta) \times\\
&\qquad\quad \big(3\,\eta^2 - 2\,\eta t + \eta\,(-3 + 2\,\eta t + \theta l\,(5 + \Phi 1 + \Phi 2) - \eta t\,\theta l\,(5 + \Phi 1 + \Phi 2))\big)\big) +\\
&\quad x\,(-1 + \eta) \times (-3\,(w\,(-1 + \eta) - 2\,\eta)\,(-1 + \eta)\,\theta p + (-1 + \eta t)\,\theta l\\
&\qquad (2 - \theta p\,(2 + 6\,\eta + \Phi 1 + \Phi 2) + w\,(-1 + \eta) \times (-2 + \theta p\,(5 + \Phi 1 + \Phi 2))))\big)\big) \Big/\\
&(2 \times (-1 + w\,(-1 + \eta))\,(x\,(-1 + \eta) - \eta)\,(w\,(-1 + \eta) + x\,(-1 + \eta) - \eta)\,(-1 + \eta t)\,\theta p)
\end{aligned}
$$