# Qual função está dentro da integral?

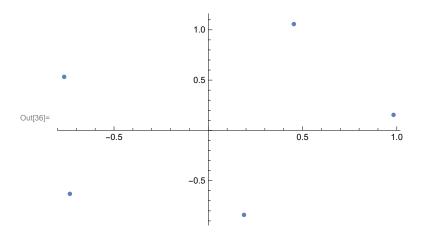
Elemento 5 nós

Função de Forma e Derivadas

```
ln[11] = n = 5;
     A = (0.8090169943749475 + 1. *r);
     B = (-1. + 1. * r - 0.7265425280053609 * s);
     Cc = (2.6180339887498953 + 1. * r + 3.077683537175254 * s);
     Dd = (-1. + 1. * r + 0.7265425280053609 * s);
     Ee = (2.6180339887498953 + 1. * r - 3.077683537175254 * s);
     den = (122.60990336999416 -
          17.888543819998326 * Power[r, 2] - 17.88854381999832 * Power[s, 2]);
     den2 = Power[122.60990336999416 - 17.888543819998326 * Power[r, 2] -
          17.88854381999832 * Power[s, 2], 2];
     NN = \{ (-11.577708763999665 * A * B * Cc) / den, 
         (9.366563145999496 * B * Dd * Cc) / den,
         (9.366563145999496 * Ee * B * Dd) / den,
          (-11.577708763999665 * A * Ee * Dd) / den,
         (4.422291236000336 * A * Ee * Cc) / den};
     dn1 = Table[0, n];
     dn2 = Table[0, n];
     dn1[[1]] = (-414.2167011199733 * r * A * B * Cc) / den2 - (11.577708763999665 * A * B) / den -
         (11.577708763999665 * A * Cc) / den - (11.577708763999665 * B * Cc) / den;
     dn1[[2]] = (335.1083505599867 * r * B * Dd * Cc) / den2 + (9.366563145999496 * B * Dd) / den +
         (9.366563145999496 * B * Cc) / den + (9.366563145999496 * Dd * Cc) / den;
     dn1[[3]] = (335.1083505599867 * r * Ee * B * Dd) / den2 + (9.366563145999496 * Ee * B) / den +
         (9.366563145999496 * Ee * Dd) / den + (9.366563145999496 * B * Dd) / den;
     dn1[[4]] = (-414.2167011199733 * r * A * Ee * Dd) / den2 - (11.577708763999665 * A * Ee) / den -
         (11.577708763999665 * A * Dd) / den - (11.577708763999665 * Ee * Dd) / den;
     dn1[[5]] = (158.21670111997315 * r * A * Ee * Cc) / den2 + (4.422291236000336 * A * Ee) / den +
         (4.422291236000336 * A * Cc) / den + (4.422291236000336 * Ee * Cc) / den;
     dn2[[1]] = (-414.21670111997315 * A * B * S * Cc) / den2 -
         (35.632523661171426 * A * B) / den + (8.41169779390614 * A * Cc) / den;
     dn2[[2]] = (335.1083505599866 * B * Dd * S * Cc) / den2 + (28.827317194355103 * B * Dd) / den +
         (6.80520646681632 * B * Cc) / den - (6.80520646681632 * Dd * Cc) / den;
     dn2[[3]] = (335.1083505599866 * Ee * B * Dd * s) / den2 + (6.80520646681632 * Ee * B) / den -
         (6.80520646681632 * Ee * Dd) / den - (28.827317194355103 * B * Dd) / den;
     dn2[[4]] = (-414.21670111997315 * A * Ee * Dd * s) / den2 -
         (8.41169779390614 * A * Ee) / den + (35.632523661171426 * A * Dd) / den;
     dn2[[5]] = (158.21670111997307 * A * Ee * S * Cc) / den2 +
         (13.61041293363264 * A * Ee) / den - (13.61041293363264 * A * Cc) / den;
```

## Matriz Jacobiana (∂<sub>ξ</sub>x)

```
ln[32]:= x = Table[0, n];
     y = Table[0, n];
     For [i = 1, i < n + 1, i++,
       x[[i]] = Cos[2\pi * i/n] + RandomReal[{-0.2, 0.2}];
       y[[i]] = Sin[2\pi * i/n] + RandomReal[{-0.2, 0.2}];
      ];
     Thread[{x, y}];
     ListPlot[%]
     dxDxi1 = Sum[dn1[[i]] * x[[i]], {i, 1, n}];
     dyDxi1 = Sum[dn1[[i]] * y[[i]], {i, 1, n}];
     dxDxi2 = Sum[dn2[[i]] * x[[i]], {i, 1, n}];
     dyDxi2 = Sum[dn2[[i]] * y[[i]], {i, 1, n}];
     detJ = dxDxi1 * dyDxi2 - dyDxi1 * dxDxi2;
```



 $B^{T}.B$ 

#### $B^T$ . $B \det J$

Deu certo! Pelo que parece a função a ser integrada é sempre um polinômio de grau 16 sobre um polinômio de grau 16, sendo que o denominador é sempre o mesmo!

Mentira! O denominador muda conforme os pontos dos nós do elemento  $(x_i, y_i)$ .

```
ln[42]:= dNdx = \frac{1}{de+1} (dyDxi2 * dn1[[1]] - dyDxi1 * dn2[[1]]);
                            dNdy = \frac{1}{detJ} \left( -dxDxi2 * dn1[[2]] + dxDxi1 * dn2[[2]] \right);
                             BBJ = dNdx * dNdy * detJ // FullSimplify
Out[44]= -(0.611102)
                                                             \left(-430.963+1.\ r^{8}+r^{7}\ \left(-2.11128-1.17047\ s\right)+r^{6}\ \left(-18.657+\left(-1.87465-1.11193\ s\right)\ s\right)+r^{6}
                                                                        r^{5} (45.2196 + s (24.7518 + (-3.20338 - 2.86421 s) s)) +
                                                                        r^{4} (107.333 + s (28.6015 + s (30.8344 + (-3.40681 - 5.85111 s) s))) +
                                                                        r^{3} \left(-317.901 + s \left(-174.342 + s \left(39.7828 + s \left(40.6317 + \left(1.43342 - 2.21701 s\right) s\right)\right)\right) + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.6337 + 3.
                                                                       r^2 (-118.313 +
                                                                                          s(-127.869 + s(-254.824 + s(26.81 + s(69.8713 + (-1.18968 - 4.36644 s)s)))))
                                                                        s (136.397 + s (667.644 + s (-23.7106 + s (-198.452 +
                                                                                                                                                 s(-1.79148 + s(20.3799 + (0.342485 - 0.627257 s)s))))) +
                                                                        r (734.393 + s (409.034 + s (-117.762 + s (-143.937 + s (-15.7614 +
                                                                                                                                                                  s (15.8799 + (2.52552 - 0.523271 s) s)))))
                                                              (404.665 + 1. r^8 + r^7 (0.683521 + 1.12179 s) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s (6.15318 + 10.1213 s)) + r^6 (-37.9054 + s
                                                                         r^{5} (-55.7533 + s (-57.9387 + s (12.1225 + 9.40122 s))) +
                                                                        r^{4} (389.471 + s (-57.2717 + s (-152.353 + s (7.62161 + 13.8389 s)))) +
                                                                        r^{3} (673.649 + s (636.135 + s (-259.561 + s (-198.618 + s (24.1371 + 15.4371 s)))) +
                                                                        r^2 (-1269.77 + s (-82.1125 +
                                                                                                            s (445.878 + s (34.0249 + s (-46.7125 + s (-3.2163 + 1.31397 s)))))) +
                                                                        s (1272.06 + s (857.182 + s (-591.264 + s (-438.042 + s (91.2966 +
                                                                                                                                                                  s (67.7356 + (-4.68474 - 3.40366 s) s))))) +
                                                                        r \left(-2218.13 + s \left(-1999.46 + s \left(1215.26 + s \left(919.692 + s \left(-217.123 + s (-217.123 + s
                                                                                                                                                                   s (-140.679 + s (12.6981 + 7.15764 s))))))))/
                                                  (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) +
                                                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                                                        r^2 (-1329. + s (-67.2378 +
                                                                                                            s (586.163 + s (17.0677 + s (-86.022 + s (-1.05891 + 4.20947 s))))) +
                                                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(0.0811638 + s \left(103.159 + s \left(0.0811638 + s \left(103.159 + s \left(0.0811638 + s \left(103.159 + s (103.159 + s \left(103.159 + s (103.159 + s (10
                                                                                                                                                                  s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                   s (-28.8278 + s (-0.686583 + 1.05119 s))))))))
```

```
In[51]:= p8r = PolynomialQuotient[Numerator[BBJ],
                                                          Denominator[BBJ] / (6.854101966249684^{-1.} r^{2} - 0.999999999999996^{s^{2}})^{4}, r]
                                           restoR = PolynomialRemainder[Numerator[BBJ],
                                                           Denominator[BBJ] / (6.854101966249684^{-1.} r^2 - 0.99999999999996^ s^2)^4, r]
Out[51]= 159.298 - 0.611102 \, r^8 + r^7 \, (0.918335 - 0.144067 \, s) + 484.22 \, s + 2332.8 \, s^2 - 1232.8 \, s^
                                                   273.411 \, s^3 - 2069.12 \, s^4 - 113.852 \, s^5 + 462.882 \, s^6 + 19.375 \, s^7 - 32.8663 \, s^8 +
                                                   r^{6} \; \left(18.512 - 0.214321 \; s - 2.23438 \; s^{2}\right) \; + \; r^{5} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(18.512 - 0.214321 \; s - 2.23438 \; s^{2}\right) \; + \; r^{5} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{3}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2} + 4.25658 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 \; s + 10.0246 \; s^{2}\right) \; + \; r^{6} \; \left(-11.4023 + 15.6771 
                                                   r^{4} (-138.416 - 126.981 s - 56.0576 s^{2} + 41.0043 s^{3} + 24.9695 s^{4}) +
                                                   r^{3} (108.549 - 12.8503 s - 182.067 s<sup>2</sup> - 149.447 s<sup>3</sup> + 23.114 s<sup>4</sup> + 22.6383 s<sup>5</sup>) +
                                                   r^{2} (346.704 + 759.116 s + 598.039 s<sup>2</sup> - 17.9163 s<sup>3</sup> - 127.577 s<sup>4</sup> - 32.9812 s<sup>5</sup> - 4.84814 s<sup>6</sup>) +
                                                   r(-279.65 - 224.538 s - 895.07 s^2 -
                                                                            500.652 \, s^3 + 472.824 \, s^4 + 330.774 \, s^5 - 63.1156 \, s^6 - 45.7962 \, s^7)
Out[52]= -261125. -861179. s - 5.35047 \times 10^6 s^2 - 91067. s^3 + 7.6706 \times 10^6 s^4 + 1
                                                   1.06354 \times 10^6 \text{ s}^5 - 4.28273 \times 10^6 \text{ s}^6 - 643260. \text{ s}^7 + 1.27793 \times 10^6 \text{ s}^8 +
                                                   168 621. s^9 - 224 551. s^{10} - 22 857.5 s^{11} + 23 441.4 s^{12} + 1577.4 s^{13} - 1351.4 s^{14} -
                                                   44.0156 \, s^{15} + 33.2439 \, s^{16} + r^7 \, \left( 224.686 + 1521.76 \, s - 8283.93 \, s^2 - 3341.42 \, s^3 + 123.2439 \, s^4 + 123.2439 \, s^2 + 123
                                                                            8546.25 \text{ s}^4 + 3441.59 \text{ s}^5 - 2352.44 \text{ s}^6 - 997.94 \text{ s}^7 + 194.133 \text{ s}^8 + 85.9519 \text{ s}^9 ) +
                                                   r^{6} (399.054 + 3337.23 s + 20558.6 s<sup>2</sup> - 11835.1 s<sup>3</sup> - 30129.7 s<sup>4</sup> + 3744.4 s<sup>5</sup> +
                                                                            12050.8 \text{ s}^6 - 425.52 \text{ s}^7 - 1966.11 \text{ s}^8 + 23.5314 \text{ s}^9 + 118.709 \text{ s}^{10}) +
                                                   r^{5} (-5796.42 - 29088.3 s + 168746. s^{2} + 101620. s^{3} - 173187. s^{4} - 95956.9 s^{5} +
                                                                             58762.4 \text{ s}^6 + 33329.2 \text{ s}^7 - 8202.97 \text{ s}^8 - 4867.23 \text{ s}^9 + 410.551 \text{ s}^{10} + 256.176 \text{ s}^{11}) +
                                                   r^4 (-11541.7 - 64345.6 s - 395406. s^2 + 162950. s^3 + 579987. s^4 - 57482.8 s^5 -
                                                                            (274275. s^6 + 7638.54 s^7 + 60254. s^8 - 540.64 s^9 - 6426.57 s^{10} + 26.813 s^{11} + 270.661 s^{12}) +
                                                   r^{3} (46 448.9 + 183 579. s - 1.14488 × 10<sup>6</sup> s<sup>2</sup> - 916 835. s<sup>3</sup> + 1.17024 × 10<sup>6</sup> s<sup>4</sup> +
                                                                            896 016. s^5 - 447 305. s^6 - 359 394. s^7 + 80 895.2 s^8 + 70 456.5 s^9 -
                                                                            7036.88 \, s^{10} - 6752.35 \, s^{11} + 239.231 \, s^{12} + 254.497 \, s^{13} ) +
                                                   r^2 (98 458.9 + 409 897. s + 2.52444 × 10<sup>6</sup> s<sup>2</sup> - 547 861. s<sup>3</sup> - 3.67824 × 10<sup>6</sup> s<sup>4</sup> +
                                                                            64905.8 \text{ s}^5 + 1.93848 \times 10^6 \text{ s}^6 + 45200.9 \text{ s}^7 - 516236. \text{ s}^8 - 13452.5 \text{ s}^9 +
                                                                            75\,463.4\,\,{s}^{10}\,+\,1299.39\,\,{s}^{11}\,-\,5811.86\,\,{s}^{12}\,-\,40.734\,\,{s}^{13}\,+\,185.197\,\,{s}^{14}\Big)\,\,+
                                                   r \left(-118405. -381738. s + 2.5857 \times 10^6 s^2 + 2.58531 \times 10^6 s^3 - 2.63472 \times 10^6 s^4 - 10^6 s^4 + 10^6 s^4 
                                                                            2.73856 \times 10^6 \text{ s}^5 + 1.06522 \times 10^6 \text{ s}^6 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^9 - 21
                                                                            22\,907.3\,s^{10}+40\,728.\,s^{11}-1189.97\,s^{12}-2883.06\,s^{13}+22.8132\,s^{14}+84.2724\,s^{15})
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In[53]:= p8s = PolynomialQuotient[restoR,
                                                                                                          Denominator [BBJ] / (6.854101966249684^{-1} - 1.^{2} - 0.99999999999996^{3})^{4}, s]
                                                                               restoRS = PolynomialRemainder[restoR,
                                                                                                            Denominator [BBJ] / (6.854101966249684^{-1.} r^2 - 0.99999999999996^{s^2})^4, s]
Out[53]= -115.09 - 3320. r + 1575.63 r^2 + 6423.02 r^3 - 3405.08 r^4 -
                                                                                             2019.92 \, r^5 + 1170.36 \, r^6 + 91.2032 \, r^7 - 74.8456 \, r^8 + \left(-351.446 - 1270.56 \, r + 1270.56
                                                                                                                                           101.634 \, r^2 + 1867.68 \, r^3 - 578.15 \, r^4 - 464.739 \, r^5 + 152.967 \, r^6 + 5.19574 \, r^7 \big) \, s + 101.634 \, r^2 + 1867.68 \, r^3 - 578.15 \, r^4 - 464.739 \, r^5 + 152.967 \, r^6 + 5.19574 \, r^7 \big) \, s + 101.634 \, r^2 + 101.634 \, r^3 + 101.634 \, r^4 + 
                                                                                                    (-2317.52 + 734.264 \, r - 302.362 \, r^2 + 688.997 \, r^3 - 129.025 \, r^4 - 121.779 \, r^5 + 37.3729 \, r^6) \, s^2 + 121.779 \, r^4 + 121.779 \, r^5 + 121.779 \, r
                                                                                                      (35.1183 + 591.609 \text{ r} - 149.216 \text{ r}^2 + 221.762 \text{ r}^3 + 0.4097 \text{ r}^4 - 18.8027 \text{ r}^5) \text{ s}^3 +
                                                                                                        (1949.56 - 603.708 \text{ r} + 21.237 \text{ r}^2 + 16.2047 \text{ r}^3 - 10.8701 \text{ r}^4) \text{ s}^4 +
                                                                                                      (173.36 - 378.709 r + 3.72175 r^2 - 8.13882 r^3) s^5 +
                                                                                                      (-432.164 + 73.6079 \text{ r} + 1.02755 \text{ r}^2) \text{ s}^6 + (-21.2163 + 48.6094 \text{ r}) \text{ s}^7 + 31.6251 \text{ s}^8
Out[54]= 4529.67 + 7.54359 \times 10^6 \text{ r} - 3.73056 \times 10^6 \text{ r}^2 - 1.91725 \times 10^7 \text{ r}^3 + 1.00704 \times 10^7 \text{ r}^4 + 1.40961 \times 10^7 \text{ r}^5 - 1.00704 \times 10^7 \text{ r}^4 + 1.40961 \times 10^7 \text{ r}^5 - 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^5 - 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^5 - 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^4 + 1.00704 \times 10^7 \text{ r}^5 - 1.
                                                                                             7.74699 \times 10^6 \, r^6 - 4.794 \times 10^6 \, r^7 + 2.76928 \times 10^6 \, r^8 + 869754. \, r^9 - 534152. \, r^{10} - 10^6 \, r^{10} + 10^6 \,
                                                                                             86\,338.9\ r^{11} + 57\,438.3\ r^{12} + 4365.54\ r^{13} - 3242.94\ r^{14} - 85.5902\ r^{15} + 74.8456\ r^{16} + 74.8456
                                                                                                 \left(-17614.6+3.45862\times10^{6}\ r-1.37028\times10^{6}\ r^{2}-7.54544\times10^{6}\ r^{3}+3.91906\times10^{6}\ r^{4}+3.45862\times10^{6}\ r^{4}+3.91906\times10^{6}\ r^{4}+3.45862\times10^{6}\ r^{4}+3.45862\times10^{6
                                                                                                                                           4.1951 \times 10^6 \, r^5 - 2.36859 \times 10^6 \, r^6 - 1.01087 \times 10^6 \, r^7 + 580198. \, r^8 + 138131. \, r^9 - 10^6 \, r^8 + 10^6 \, 
                                                                                                                                           68\,497.7\,\,r^{10}\,-\,13\,388.2\,\,r^{11}\,+\,4026.51\,\,r^{12}\,+\,898.559\,\,r^{13}\,-\,103.894\,\,r^{14}\,-\,26.4843\,\,r^{15}\big)\,\,s\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}\,+\,100\,\,r^{10}
                                                                                                 \left(-58\,120.4-3.33871\times10^6\ r+2.06327\times10^6\ r^2+8.31525\times10^6\ r^3-4.79952\times10^6\ r^4-6.06327\times10^6\ r^4+8.31525\times10^6\ r^4-6.06327\times10^6\ r^4+8.31525\times10^6\ r^4+
                                                                                                                                             5.48481 \times 10^6 \text{ r}^5 + 3.24074 \times 10^6 \text{ r}^6 + 1.54125 \times 10^6 \text{ r}^7 - 965460. \text{ r}^8 - 206309. \text{ r}^9 + 1.54125 \times 10^6 \text{ r}^8 - 1.54125 
                                                                                                                                           \left(-9766.25 - 1.5017 \times 10^6 \ r + 782459. \ r^2 + 3.14892 \times 10^6 \ r^3 - 1.93873 \times 10^6 \ r^4 - 1.000 \ r^4 - 1.0
                                                                                                                                             1.45391 \times 10^6 \text{ r}^5 + 1.0358 \times 10^6 \text{ r}^6 + 231389. \text{ r}^7 - 212287. \text{ r}^8 -
                                                                                                                                           11994.3 r^9 + 19531.3 r^{10} - 289.476 r^{11} - 720.794 r^{12} + 44.0297 r^{13}) s^3 +
                                                                                                    147 436. r^7 + 102648. r^8 + 11462.4 r^9 - 10007. r^{10} - 163.877 r^{11} + 318.469 r^{12}) s^4 + 1000
                                                                                                 (4266.88 + 216962. r - 142613. r^2 - 438135. r^3 + 311074. r^4 + 158780. r^5 - 142613. r^4 + 158780. r^5 - 142613. r^5 - 14261
                                                                                                                                             142 464. r^6 - 9419.74 r^7 + 21 695.5 r^8 - 1613.05 r^9 - 1141.52 r^{10} + 167.512 r^{11}) s^5 +
                                                                                                    (-1311.32 - 23955.2 r + 21441.5 r^2 + 57519.5 r^3 - 38506.4 r^4 - 28028.6 r^5 +
                                                                                                                                           19059.2 r^6 + 3726.29 r^7 - 3103.29 r^8 - 21.7154 r^9 + 121.812 r^{10}) s^6 +
                                                                                                 (-359.938 - 10430. r + 8400.77 r^2 + 20335.4 r^3 - 16242.7 r^4 - 5225.99 r^5 +
                                                                                                                                           6111.06 r^6 - 425.014 r^7 - 524.616 r^8 + 96.9983 r^9) s^7
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In[55]:= restoRSR = PolynomialRemainder[restoRS,
                                                                                           Denominator[BBJ] / (6.854101966249684^{-1} - 1.^{2} - 0.99999999999996^{3})^{4}, r]
Out[55]= -261125. -861179. s -5.35047 \times 10^6 s^2 -91067. s^3 +7.6706 \times 10^6 s^4 +
                                                                                1.06354 \times 10^6 \text{ s}^5 - 4.28273 \times 10^6 \text{ s}^6 - 643260. \text{ s}^7 + 1.27793 \times 10^6 \text{ s}^8 + 1
                                                                                168621. s^9 - 224551. s^{10} - 22857.5 s^{11} + 23441.4 s^{12} + 1577.4 s^{13} - 1351.4 s^{14} -
                                                                                44.0156\,\,s^{15} + 33.2439\,\,s^{16} + r^7\,\,\left(224.686 + 1521.76\,\,s - 8283.93\,\,s^2 - 3341.42\,\,s^3 + 124.686\,\,s^{15} + 33.2439\,\,s^{16} + r^{12}\right)
                                                                                                                           8546.25 \text{ s}^4 + 3441.59 \text{ s}^5 - 2352.44 \text{ s}^6 - 997.94 \text{ s}^7 + 194.133 \text{ s}^8 + 85.9519 \text{ s}^9 ) +
                                                                                r^{6} \, \left(399.054 + 3337.23 \, s + 20558.6 \, s^{2} - 11835.1 \, s^{3} - 30129.7 \, s^{4} + 3744.4 \, s^{5} + 1232.4 \, s^{2} + 3337.23 \, s + 20558.6 \, s^{2} + 1235.1 \, s^{3} + 1235.1 \, s^{2} + 123
                                                                                                                         12050.8 \text{ s}^6 - 425.52 \text{ s}^7 - 1966.11 \text{ s}^8 + 23.5314 \text{ s}^9 + 118.709 \text{ s}^{10}) +
                                                                                r^{5} \left(-5796.42 - 29088.3 \ s + 168746. \ s^{2} + 101620. \ s^{3} - 173187. \ s^{4} - 95956.9 \ s^{5} + 101620. \ s^{5} + 1016200. \ s^{5} + 10162000. \ s^{5}
                                                                                                                           58762.4 \text{ s}^6 + 33329.2 \text{ s}^7 - 8202.97 \text{ s}^8 - 4867.23 \text{ s}^9 + 410.551 \text{ s}^{10} + 256.176 \text{ s}^{11}) +
                                                                                r^4 \left( -11\,541.7 - 64\,345.6\,s - 395\,406.\,s^2 + 162\,950.\,s^3 + 579\,987.\,s^4 - 57\,482.8\,s^5 - 123\,83.8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,8\,s^4 + 123\,8\,s^4 + 123\,8\,s^2
                                                                                                                         274275. s^6 + 7638.54 s^7 + 60254. s^8 - 540.64 s^9 - 6426.57 s^{10} + 26.813 s^{11} + 270.661 s^{12} + 36.813 s^{11} + 270.661 s^{12} + 36.813 s^{11} + 36.
                                                                                r^{3} (46 448.9 + 183 579. s - 1.14488 × 10<sup>6</sup> s<sup>2</sup> - 916 835. s<sup>3</sup> + 1.17024 × 10<sup>6</sup> s<sup>4</sup> +
                                                                                                                           896 016. s^5 - 447 305. s^6 - 359 394. s^7 + 80 895.2 s^8 + 70 456.5 s^9 -
                                                                                                                         7036.88 \, s^{10} - 6752.35 \, s^{11} + 239.231 \, s^{12} + 254.497 \, s^{13} ) +
                                                                                r^{2} (98458.9 + 409897. s + 2.52444 × 10<sup>6</sup> s<sup>2</sup> - 547861. s<sup>3</sup> - 3.67824 × 10<sup>6</sup> s<sup>4</sup> +
                                                                                                                         64\,905.8\,\mathrm{s}^5+1.93848\times10^6\,\mathrm{s}^6+45\,200.9\,\mathrm{s}^7-516\,236.\,\mathrm{s}^8-13\,452.5\,\mathrm{s}^9+
                                                                                                                         75463.4 \, s^{10} + 1299.39 \, s^{11} - 5811.86 \, s^{12} - 40.734 \, s^{13} + 185.197 \, s^{14}) +
                                                                                r \left(-118405. -381738. s + 2.5857 \times 10^6 s^2 + 2.58531 \times 10^6 s^3 - 2.63472 \times 10^6 s^4 - 10^6 s^4 + 10^6 s^4 
                                                                                                                           2.73856 \times 10^6 \text{ s}^5 + 1.06522 \times 10^6 \text{ s}^6 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^8 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^7 - 215759. \text{ s}^9 - 303243. \text{ s}^9 + 1.25316 \times 10^6 \text{ s}^9 - 303243. \text{ s}
                                                                                                                         22\,907.3\,\mathrm{s}^{10} + 40\,728.\,\mathrm{s}^{11} - 1189.97\,\mathrm{s}^{12} - 2883.06\,\mathrm{s}^{13} + 22.8132\,\mathrm{s}^{14} + 84.2724\,\mathrm{s}^{15}
     ln[57]:= BBJ2 = (p8r + p8s + restorS)
                                                                                                                                             \left( \text{Denominator}[BBJ] / \left( 6.854101966249684 \right) - 1. r^2 - 0.9999999999999996 s^2 \right)^4 \right) / 
                                                                                                   (6.854101966249684^{-1.} r^{2} - 0.999999999999996^{3})^{4}
     In[61]:= FullSimplify[BBJ2]
     In[62]:= Expand [BBJ2]
                                                                         \frac{\frac{1922.34 \, r^2}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{3599.65 \, r}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{1922.34 \, r^2}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4}
                                                                                        \frac{1922.34\,r^2}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}\,+\,\frac{6531.57\,r^3}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}\,-\,\frac{3543.5\,r^4}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}\,-\,\frac{1}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}
                                                                                                                                                                                                                                                                                                                                                                                            \frac{1188.88 \, r^6}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{92.1216 \, r^7}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{132.773 \, s}{1495.1 \, r \, s}
                                                                                        \frac{75.4567\,r^8}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}-\frac{1495.1\,r\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^4}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^2}+\frac{132.773\,s}{\left(6.8541-1.\,\,r^2-1.\,\,s^2\right)^2}+\frac{132.773\,s}{\left(6.854
                                                                                      \frac{860.75 \, r^2 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{1854.83 \, r^3 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{705.131 \, r \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{152.752 \, r^6 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{5.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{152.752 \, r^6 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, r^7 \, s}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} + \frac{15.05167 \, 
                                                                                                                                                                                                                                                                                                                                                                         +\frac{152.752\,r^{6}\,s}{\left(6.8541-1.\,r^{2}-1.\,s^{2}\right)^{4}}+\frac{5.05167\,r^{7}\,s}{\left(6.8541-1.\,r^{2}-1.\,s^{2}\right)^{4}}+\\
                                                                                                                                                                                                                                                                                                                                                                                              \frac{160.806 \text{ r s}^2}{\left(6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2\right)^4} +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       \frac{295.677 r^2 s^2}{\left(6.8541 - 1. r^2 - 1. s^2\right)^4} +
                                                                                          \frac{506.93 \, r^3 \, s^2}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{185.083 \, r^4 \, s^2}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} - \frac{1}{\left(6.8541 - 1. \, r^2 - 1. \,
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  \frac{111.755 \, r^5 \, s^2}{\left(6.8541 - 1. \, r^2 - 1. \, s^2\right)^4} +
                                                                                                                                                                                                                                                                                                                                                                                            \frac{238.293\,{s}^{3}}{\left(6.8541-1.\,{r}^{2}-1.\,{s}^{2}\right)^{4}}\,\,{}^{+}
                                                                                        \frac{167.132\,r^2\,s^3}{\left(6.8541-1.\,r^2-1.\,s^2\right)^4}+\frac{72.3151\,r^3\,s^3}{\left(6.8541-1.\,r^2-1.\,s^2\right)^4}+\frac{41.414\,r^4\,s^3}{\left(6.8541-1.\,r^2-1.\,s^2\right)^4}
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\frac{113.3565}{(6.8541-1. r^2-1. s^2)^4} - \frac{113.3565}{(6.8541-1. r^2-1. s^2)^4} - \frac{136.664+3}{(6.8541-1. r^2-1. s^2)^4}
                                                                                                                                                                                    39.3187 r<sup>3</sup> s<sup>4</sup>
\frac{130.34 \text{ ft S}}{\left(6.8541 - 1.\text{ r}^2 - 1.\text{ s}^2\right)^4} + \frac{39.5167 \text{ ft S}}{\left(6.8541 - 1.\text{ r}^2 - 1.\text{ s}^2\right)^4} + \frac{14.0994 \text{ ft S}}{\left(6.8541 - 1.\text{ r}^2 - 1.\text{ s}^2\right)^4}
                                      59.5076 s<sup>5</sup>
                                                                                                                                                                                     47.9354 r s<sup>5</sup>
 (6.8541 - 1. r^2 - 1. s^2)^4
                                                                                                                                                           (6.8541 - 1. r^2 - 1. s^2)^4
                                                                                                                                                                                                                                                                                                                           (6.8541 - 1. r^2 - 1. s^2)^4
                               14.4995 \, r^3 \, s^5
                                                                                                                                                                                                   30.7182 s<sup>6</sup>
 (6.8541 - 1. r^2 - 1. s^2)^4
                                                                                                                                                            (6.8541 - 1. r^2 - 1. s^2)^4
                                                                                                                                                                                                                                                                                                                       (6.8541 - 1. r^2 - 1. s^2)^4
 \frac{(6.8541 - 1. r^2 - 1. s^2)^4}{(6.8541 - 1. r^2 - 1. s^2)^4} + \frac{(6.8541 - 1. r^2 - 1. s^2)^4}{(6.8541 - 1. r^2 - 1. s^2)^4}
                                                                                                                                                                                                                                                                                                                (6.8541 - 1. r^2 - 1. s^2)^4
\frac{1.2.7110.5}{\left(6.8541-1.\ r^2-1.\ s^2\right)^4}+4529.67\left/\left(\left(6.8541-1.\ r^2-1.\ s^2\right)^4\right)
                     (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^6 (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) + r^{3} (5.87158 +
                                                         s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) + r^{2} (-1329. + s (-1329. + 
                                                         s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(7.54359 \times 10^6 \, r) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284434 + 0.284434 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.28444 + 0.2
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) + r^{3} (5.87158 +
                                                        s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) + r^{2} (-1329. + s (-1329. + 
                                                         s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (1
                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(3.73056 \times 10^6 \,\mathrm{r}^2) / (6.8541 - 1.\,\mathrm{r}^2 - 1.\,\mathrm{s}^2)^4 (2308.24 + 1.\,\mathrm{r}^8 + \mathrm{r}^7) (0.0749944 - 0.284433 \,\mathrm{s}) +
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                        s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                 r(-11.7828 + s(-184.642 + s(-0.423864 + s(103.159 +
                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(\textbf{1.91725}\times\textbf{10}^{7}\,\,\textbf{r}^{3}\right)\,\,\big/\,\,\left(\,\textbf{6.8541}\,-\,\textbf{1.}\,\,\textbf{r}^{2}\,-\,\textbf{1.}\,\,\textbf{s}^{2}\,\right)^{\,4}\,\,\left(\,\textbf{2308.24}\,+\,\textbf{1.}\,\,\textbf{r}^{8}\,+\,\textbf{r}^{7}\,\,\left(\,\textbf{0.0749944}\,-\,\textbf{0.284433}\,\,\textbf{s}\,\right)\,\,+\,\,\textbf{1.91725}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2}\,\,\mathbf{r}^{2
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                 r^2 (-1329. +
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s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + 3.008891 + 3.00947 s\right)\right)\right)
                                               r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                       s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
(1.00704 \times 10^7 \, r^4) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.074994 - 0.28444 \, s) + r^7 (0.074994 - 0.28444 \, s) + r^7 (0
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                               r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                               r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                               r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                               r^2 (-1329. +
                                                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                               r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s \left(104.644 + s (104.644 + s (104.644
                                                                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                                 s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                       s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(1.40961 \times 10^7 \, r^5) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284434 \, s)
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                               r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                               r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                               r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                               r^2 (-1329. +
                                                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                               r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                                 s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                       s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
(7.74699 \times 10^6 \, r^6) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^8 
                                                 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                               r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                               r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                                r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) 
                                               r^2 (-1329. +
                                                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                               r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                                 s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                       s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (4.794 \times 10^6 \, r^7) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284434 \, s)
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                               r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                               r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                               r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                               r^2 (-1329. +
                                                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                               r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s \left(-184.642 + s (-184.642 + s (-184.644 +
                                                                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                                 s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
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s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
\left(2.76928\times10^{6}\ r^{8}\right)\left/\;\left(\;6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\;\left(\;2308.24+1.\ r^{8}+r^{7}\;\left(\;0.0749944-0.284433\;s\;\right)\right.\right.+\left.\left(\;2.76928\times10^{6}\ r^{8}\right)\left/\;\left(\;6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\right.\right.
                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                              r^2 (-1329. +
                                                  s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                             s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
\left(869\,754.\;r^9\right)\,\left/\,\left(\left.6.8541\,-\,1.\;r^2\,-\,1.\;s^2\right)^4\,\left(2308.24\,+\,1.\;r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\;s\right)\right.\right.\right.
                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                              r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                              r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                             s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right)
(534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534152. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534162. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (534162. r^{10}) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (634162. r^{10}) / (634162.
                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                               r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.28601 + 1.81358 \, s\right) + r^{2} \left(-0.28601 + 1.81358 \, s\right) + r^{2} \left(-0.28601 + 1.813
                              r^2 (-1329. +
                                                  s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                             s \ \left( \ -\ 28.8278 + s \ \left( \ -\ 0.686583 + 1.05119 \ s \ \right) \ \right) \ \right) \ \right) \ \right) \ -
\left(86\,338.9\,r^{11}\right)\,\left/\,\left(\,6.8541\,-\,1.\,\,r^{2}\,-\,1.\,\,s^{2}\,\right)^{\,4}\,\left(2308.24\,+\,1.\,\,r^{8}\,+\,r^{7}\,\left(0.0749944\,-\,0.284433\,\,s\,\right)\,+\,1.064338\,\right)\right)\right)
                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                              r^2 (-1329. +
                                                 s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                              r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                            s(-28.8278 + s(-0.686583 + 1.05119 s)))))) +
\left(57\,438.3\,r^{12}\right)\left/\,\left(\,6.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^{\,4}\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.16441433\,s\right)\right.\right.
                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                  r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                  r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                  r^2 (-1329. +
                                                         s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                  r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                   s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                 s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(4365.54 \, r^{13}) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s))
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                  r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                  r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                  r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                  r^2 (-1329. +
                                                         \hspace{3.5cm} 
                                  r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                   s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(3242.94\,r^{14}\right)\,\left/\,\left(\,6.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\,\right)^{\,4}\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\,\right)\,+\,3642.94\,r^{14}\right)\,\right.\right)
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                  r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                  r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                  r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                  r^2 (-1329. +
                                                         s (-67.2378 + s (586.163 + s (17.0677 + s (-86.022 + s (-1.05891 + 4.20947 s))))) +
                                  r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                   s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                 s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                  r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                  r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) \right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \,
                                  r^2 (-1329. +
                                                        s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                  r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.4238
                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                   s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(74.8456 \, r^{16}) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.2844343 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.07494 - 0.284434 \, s) + r^7 (0.07494 - 0.2844434 \, s) + r^7 (0.07494 - 0.284443
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                  r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                  r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                  r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                  r^2 (-1329. +
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s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (17614.6 s) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (17614.6 s) / ((6.8541 - 1. r^8 + r
                                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                               r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 +
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                               s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(3.45862 \times 10^6 \text{ r s}) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (3.45862 \times 10^6 \text{ r s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (3.45862 \times 10^6 \text{ r}) / (6.8541 - 1. \text{ r}^8 + 1. \text{ r}^
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s}) + (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s}) + (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (1.37028 \times 10^6 \, \text{r}^2 \, \text{s}) / (1.37028 \times 10^6 \, \text{r
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s))))) -
(7.54544 \times 10^6 \text{ r}^3 \text{ s}) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + 1. \text{ r}^8 + 1
                                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s \left(-184.642 + s (-184.642 + s (-184.644 +
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
```

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s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
(3.91906 \times 10^6 \, r^4 \, s) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284434 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.074994 - 0.28444 \, s) + r^7 (0.074994 - 0
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                                    s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
(4.1951 \times 10^6 \text{ r}^5 \text{ s}) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (4.1951 \times 10^6 \text{ r}^5 \text{ s})) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (4.1951 \times 10^6 \text{ r}^5 \text{ s})) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (4.1951 \times 10^6 \text{ r}^5 \text{ s})) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}))) + (4.1951 \times 10^6 \text{ r}^5 \text{ s})) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}))) + (4.1951 \times 10^6 \text{ r}^5 \text{ s})) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}))) + (4.1951 \times 10^6 \text{ r}^5 + 1. \text{ r}^8 + 1. \text{ r}^8
                                 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                      s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                    s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s))))) -
\left(\textbf{2.36859}\times\textbf{10}^{6}~\textbf{r}^{6}~\textbf{s}\right)~\Big/~\left(\left(\textbf{6.8541}-\textbf{1.}~\textbf{r}^{2}-\textbf{1.}~\textbf{s}^{2}\right)^{4}~\left(\textbf{2308.24}+\textbf{1.}~\textbf{r}^{8}+\textbf{r}^{7}~\left(\textbf{0.0749944}-\textbf{0.284433}~\textbf{s}\right)~+\right.
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s)))))))
(1.01087 \times 10^6 \, r^7 \, s) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + 1.01087 \times 10^6 \, r^7 \, s)
                                 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                      s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                         s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(580\,198.\,r^8\,s) / (6.8541-1.\,r^2-1.\,s^2)^4 (2308.24+1.\,r^8+r^7) (0.0749944-0.284433\,s)+
                                 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                            r^2 (-1329. +
                                              s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                            r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                   s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                            s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                     s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
(138131. r^9 s) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (138131. r^9 s) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (138131. r^9 s) / (1381311. r^9 s) / (13
                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                            r^{2} (-1329. +
                                              s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                   s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                            s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                    s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(68\,497.7\,r^{10}\,s\right)\,\left/\,\left(\,6.8541\,-\,1.\,\,r^{2}\,-\,1.\,\,s^{2}\,\right)^{\,4}\,\left(\,2308.24\,+\,1.\,\,r^{8}\,+\,r^{7}\,\left(\,0.0749944\,-\,0.284433\,s\,\right)\,+\,3666497.7\,r^{10}\,s\,\right)\right)\right)
                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                            r^2 (-1329. +
                                              s (-67.2378 + s (586.163 + s (17.0677 + s (-86.022 + s (-1.05891 + 4.20947 s))))) +
                            r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                            s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                     s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(13388.2 \, r^{11} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s))
                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) \right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \,
                            r^2 (-1329. +
                                              s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.4238
                                                                                                   s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                            s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                    s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(4026.51 \, r^{12} \, s) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284434 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.074994 - 0.28444 \, s) + r^7 (0.074994 - 0.28
                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                            r^2 (-1329. +
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s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + 3.008891 + 3.00947 s\right)\right)\right)
                                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                    s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (898.559 \, r^{13} \, s) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s) + r^7 \, (0.0749944 - 0.284433 \, s)) + r^7 \, (0.0749944 - 0.284433 \, s))
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                       r^{3} \ \left(5.87158 + s \ \left(40.5156 + s \ \left(1.50515 + s \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-0.228601 + 1.81358 \, s\right)
                                       r^2 (-1329. +
                                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s \left(104.644 + s (104.644 + s (104.644
                                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                    s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
(103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^{14} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 \, (2308.24 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^2 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^2 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^2 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^2 + 1. \, r^8 + r^7 \, (0.0749944 - 0.284433 \, s)) + (103.894 \, r^2 + 1. \, r^8 + 1
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                       r^2 (-1329. +
                                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                       r (-11.7828 + s (-184.642 + s (-0.423864 + s (103.159 +
                                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                    s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
(26.4843 \, r^{15} \, s) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284433 \, s)) + r^7 
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                       r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                       r^{3} \ \left(5.87158 + s \ \left(40.5156 + s \ \left(1.50515 + s \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ \right) \ + \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right) \ + \ \left(-0.228601 + 1.81358 \, s\right)
                                       r^2 (-1329. +
                                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                    s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (58120.4 \text{ s}^2) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (6.8541 - 1. \text{ r}^8 + \text{r}^7) (0.0749944 - 0.284433 \text{ s}))
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                       r^2 (-1329. +
                                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s \left(-184.642 + s (-184.642 + s (-184.644 +
                                                                                                                                          s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
```

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s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(3.33871 \times 10^6 \text{ r s}^2) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + 1. \text{ r}^8 + 1. \text{
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(2.06327 \times 10^6 \text{ r}^2 \text{ s}^2) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4)
                             r^{7} (0.0749944 - 0.284433 s) + r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                         s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(8.31525 \times 10^6 \, \text{r}^3 \, \text{s}^2) / ((6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + 1. \, \text{r}^8)^4)
                             r^{7} (0.0749944 - 0.284433 s) + r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                        s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(4.79952 \times 10^6 \, r^4 \, s^2) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + 1. \, r^8)^4 
                             r^{7} (0.0749944 - 0.284433 s) + r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(5.48481 \times 10^6 \text{ r}^5 \text{ s}^2) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4)
                             r^{7} (0.0749944 - 0.284433 s) + r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
```

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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-184
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                            s(-28.8278 + s(-0.686583 + 1.05119 s)))))) +
\left(3.24074\times10^{6}\;r^{6}\;s^{2}\right) \left/\;\left(6.8541-1.\;r^{2}-1.\;s^{2}\right)^{4}\;\left(2308.24+1.\;r^{8}+1.\;r^{8}\right)^{4}\right|
                              r^7 (0.0749944 - 0.284433 s) +
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                  s \left( -67.2378 + s \left( 586.163 + s \left( 17.0677 + s \left( -86.022 + s \left( -1.05891 + 4.20947 \, s \right) \right) \right) \right) \right) + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00073 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                        s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                            s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(1.54125 \times 10^6 \text{ r}^7 \text{ s}^2) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4
                              r^7 (0.0749944 - 0.284433 s) +
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                           s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right)
\left(965\,460.\;r^{8}\;s^{2}\right)\left/\;\left(\,6.8541\,-\,1.\;r^{2}\,-\,1.\;s^{2}\,\right)^{\,4}\,\left(\,2308.24\,+\,1.\;r^{8}\,+\,r^{7}\,\left(\,0.0749944\,-\,0.284433\;s\,\right)\right.\right.\right.\right.
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                         s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                            s \ \left( -\,28.8278 + s \ \left( -\,0.686583 + 1.05119 \ s \right) \,\right) \,\right) \,\right) \,\right) \,-\,
(206\,309.\,r^9\,s^2) / ((6.8541-1.\,r^2-1.\,s^2)^4 (2308.24+1.\,r^8+r^7 (0.0749944-0.284433\,s)+1.
                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
```

 $r^{4}$  (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +

 $r^{5}$  (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +

```
r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.4238
                                                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
 (142642. r^{10} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^7 (0.07494 - 0.284443 s) + r^7 (0.07494 - 0.284443 s) + r^7 (0.07494 - 0.28444 s) + r^7 (0.07494 - 0.2844 s) + r
                                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} \ \left(-1.11986 + s \ \left(-0.0312747 + \left(-0.18738 + 0.480139 \ s\right) \ s\right) \right) \ +
                                            r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                             r^{3} \; \left(5.87158 + s \; \left(40.5156 + s \; \left(1.50515 + s \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right)\right)\right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \right) \; + \; \left(-18.3416 + s \; \left(-0.228601 + 1.81358 \; s\right)\right) \; \right) \; \left(-0.228601 + 1.81358 \; s\right) \; \right) \; \left(-0.228601 + 1.81358 \; s\right) \; \right) \; \left(-0.228601 + 1.81358 \; s\right) \; \left(-0.22
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                        s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
 (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12340.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12360.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12360.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12360.6 r^{11} s^2) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (12360.6 r^{11} s^2) / ((6.8541 - 1. r^2 -
                                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.423864
                                                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s))))) -
(10146.6 \, r^{12} \, s^2) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.07494 - 0.284434 \, s)
                                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} \left( -1.11986 + s \left( -0.0312747 + \left( -0.18738 + 0.480139 \, s \right) \, s \right) \right) \, + \\
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                            r^2 \left(-1329.~+\right.
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                            r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s (1
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s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                          s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (271.503 \, r^{14} \, s^2) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284434 \, s)
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                        r^2 (-1329. +
                                                                    s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s 
                                                                                                                                                s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (9766.25 \text{ s}^3) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) +
                                         r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                        r^2 (-1329. +
                                                                  s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                                                s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(1.5017 \times 10^6 \text{ r s}^3) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (1.5017 \times 10^6 \text{ r s}^3)) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (1.5017 \times 10^6 \text{ r s}^3) / (1.5017 \times 10^6 \text{ r s}^3)) / (1.5017 \times 10^6 \text{ r s}^3) / (1.5017 \times 10^6 \text{ r s}^3)) / (1.5017 \times 10^6 \text{ r s
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                        r^2 (-1329. +
                                                                     s \left( -67.2378 + s \left( 586.163 + s \left( 17.0677 + s \left( -86.022 + s \left( -1.05891 + 4.20947 \, s \right) \right) \right) \right) \right) + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074 + 3.00074
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 +
                                                                                                                                                s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
(782459. r^2 s^3) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (2308.24 + 1. r^8 + r
                                         r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                        r^2 (-1329. +
                                                                    s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                                s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                        s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
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(3.14892 \times 10^6 \text{ r}^3 \text{ s}^3) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4)
                             r^7 (0.0749944 - 0.284433 s) +
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                           s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(1.93873 \times 10^6 \text{ r}^4 \text{ s}^3) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4 
                             r^7 (0.0749944 - 0.284433 s) +
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                             r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                              r^{3} \left( 5.87158 + s \left( 40.5156 + s \left( 1.50515 + s \left( -18.3416 + s \left( -0.228601 + 1.81358 \, s \right) \right) \right) \right) \right. + \\  r^{3} \left( 5.87158 + s \left( 40.5156 + s \left( 1.50515 + s \left( -18.3416 + s \left( -0.228601 + 1.81358 \, s \right) \right) \right) \right) \right) \right) + \\  r^{3} \left( 5.87158 + s \left( 40.5156 + s \left( 1.50515 + s \left( -18.3416 + s \left( -0.228601 + 1.81358 \, s \right) \right) \right) \right) \right) \right) \right) \right) + \\  r^{3} \left( 5.87158 + s \left( 40.5156 + s \left( 1.50515 + s \left( -18.3416 + s \left( -0.228601 + 1.81358 \, s \right) \right) \right) \right) \right) \right) \right) \right) + \\  r^{3} \left( 5.87158 + s \left( 40.5156 + s \left( -18.3416 + s \left( -18.3416 + s \left( -0.228601 + 1.81358 \, s \right) \right) \right) \right) \right) \right) \right) \right) + \\  r^{3} \left( 5.87158 + s \left( -18.3416 + s ( -18.3416 + s ( -18.3416 + s \left( -18.3416 + s ( -18.
                             r^2 (-1329. +
                                                  s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                             r (-11.7828 + s (-184.642 + s (-0.423864 + s (103.159 +
                                                                                                           s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(1.45391 \times 10^6 \text{ r}^5 \text{ s}^3) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + 1. \text{ r}^8)^4
                              r^7 (0.0749944 - 0.284433 s) +
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.64
                                                                                                           s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                              s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(1.0358 \times 10^6 \text{ r}^6 \text{ s}^3) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (1.0358 \times 10^6 \text{ r}^6 \text{ s}^3)) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (1.0358 \times 10^6 \text{ r}^6 \text{ s}^3)) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s})) + (1.0358 \times 10^6 \text{ r}^6 \text{ s}^3)) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}))) + (1.0358 \times 10^6 \text{ r}^6 \text{ s}^3)) / 
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5}(-1.11986 + s(-0.0312747 + (-0.18738 + 0.480139 s))) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                           s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                               s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
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(231389. r^7 s^3) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (231389. r^7 s^3)) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (231389. r^7 s^3)) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (231389. r^7 s^3)) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s))) + (231388.24 + 1. r^8 + r^8
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                                          s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + c
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-184
                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                   s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(212\ 287.\ r^8\ s^3)\ /\ ((6.8541\ -1.\ r^2\ -1.\ s^2)^4\ (2308.24\ +1.\ r^8\ +r^7\ (0.0749944\ -0.284433\ s)\ +
                                    r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                   r^2 (-1329. +
                                                         s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                   s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right)
(11994.3 \, r^9 \, s^3) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^8 +
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                   r^2 (-1329. +
                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 +
                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                   s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(19531.3 \, r^{10} \, s^3) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s))
                                    r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                    r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right)
                                   r^2 (-1329. +
                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s \left(-184.642 + s (-184.642 + s (-184.644 +
                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                   s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(289.476\ r^{11}\ s^{3}\right) \left/\ \left(6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)+1.5644434433\right)\right)\right.
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
```

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r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                      r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                      r^2 (-1329. +
                                                              s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                                      r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                       s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                             s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right)
\left(720.794\ r^{12}\ s^{3}\right)\ /\ \left(\ \left(6.8541\ -\ 1.\ r^{2}\ -\ 1.\ s^{2}\right)^{4}\ \left(2308.24\ +\ 1.\ r^{8}\ +\ r^{7}\ \left(0.0749944\ -\ 0.284433\ s\right)\ +\ 1.\ r^{2}\ r^
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                      r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                      r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                      r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                      r^2 (-1329. +
                                                              s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                      r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s \left(104.644 + s (104.644 + s (104.644
                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                       s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                             s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
\left(44.0297\ r^{13}\ s^{3}\right) \left/\ \left(6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)+1.5344434433\right)\right)\right|
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                      r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                      r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                      r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                      r^2 \left(-1329.~+\right.
                                                             s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                                      r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                       s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                             s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
\left(17\,371.1\,s^4\right) \left/ \, \left(\, \left(6.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right. \right) \right. + \left. \left(\, \left(17\,371.1\,s^4\right) \,\right) \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right) \right) \right) \right. + \left. \left(\, \left(17\,371.1\,s^4\right) \,\right) \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right) \right) \right) \right. + \left. \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right) \right] \right) \right] \right] + \left. \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right) \right] \right] \right] \right] \right] \right] \left. \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right] \right] \right. \\ \left. \left(\, \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\right)\,+\,1.1\,s^4\right) \right] \right. \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \right] \right. \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4\,\left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \right] \right. \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \right] \right. \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \right] \right. \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,s^2\right)^4 \\ \left. \left(16.8541\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,\,r^2\,-\,1.\,\,r^2\,-\,1.\,\,\,r^2\,-\,1.\,\,\,r^2\,-\,1.\,\,\,r^2\,-\,1.\,\,\,r
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                      r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                      r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                      r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                      r^2 (-1329. +
                                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                      r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                       s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                             s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (490729. r s^4) / (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (490729. r s^4) / (6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (490729. r s^4) / (6.8541 - 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (490729. r s^4) / (6.8541 - 1. r^8 + 
                                       r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                      r^{5} \ \left(-1.11986 + s \ \left(-0.0312747 + \left(-0.18738 + 0.480139 \ s\right) \ s\right) \right) \ +
                                      r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                      r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                      r^2 (-1329. +
                                                              s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
```

```
r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.4238
                                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                        s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (368682. r^2 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^8 +
                                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                            r^2 (-1329. +
                                                                         s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                            r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                              s \ \big( \ 281.022 \ + \ s \ \big( -1353.73 \ + \ s \ \big( -114.256 \ + \ s \ \big( \ 296.578 \ + \ s \ \big( 15.3937 \ + \\
                                                                                                                                                                                         s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
 \left(1.19906 \times 10^6 \ r^3 \ s^4\right) \ / \ \left(\ \left(6.8541 - 1. \ r^2 - 1. \ s^2\right)^4 \ \left(2308.24 + 1. \ r^8 + 1. \ r^
                                            r^7 (0.0749944 - 0.284433 s) +
                                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(750674. r^4 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (6.8541 - 1. r^8 + r^8 + r^8 (0.0749944 - 0.284433 s)) + (6.8541 - 1. r^8 + r^8 
                                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                             r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.22
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                         s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (691999. r^5 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^7 (0.074994 - 0.284435 s) + r^7 (0.074994 - 0.28445 s) + r^7 (0.074994 - 0.28445 s) + r^7 (0.074994 
                                            r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                            r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                            r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                            r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                            r^2 (-1329. +
                                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                            r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444
                                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
```

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s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                         s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (147436. r^7 s^4) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (147436. r^7 s^4) / ((6.8541 - 1. r^8 + r^8 + r^8 s^4) / ((6.8541 - 1. r^8 + r^8 + r^8 s^4) / ((6.8541 - 1. r^8 + r^8 + r^8 s^4) / ((6.8541 - 1. r^8 + r^8 + r^8 + r^8 s^4) / ((6.8541 - 1. r^8 + r^8
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                               s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                         s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                              r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                        s(-28.8278 + s(-0.686583 + 1.05119 s)))))) +
\left(11\,462.4\,r^{9}\,s^{4}\right)\,\Big/\,\left(\,\left(6.8541\,-\,1.\,\,r^{2}\,-\,1.\,\,s^{2}\,\right)^{\,4}\,\left(2308.24\,+\,1.\,\,r^{8}\,+\,r^{7}\,\left(0.0749944\,-\,0.284433\,s\,\right)\,+\,362.4\,r^{2}\,s^{2}\,\right)\,\left(\,\left(6.8541\,-\,1.\,\,r^{2}\,-\,1.\,\,s^{2}\,\right)^{\,4}\,\left(2308.24\,+\,1.\,\,r^{2}\,+\,r^{3}\,\left(0.0749944\,-\,0.284433\,s\,\right)\,+\,362.4\,r^{2}\,s^{2}\,\right)\,\right)
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                               s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + c
                             r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                     s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                             s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                        s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(10\,007.\;r^{10}\;s^{4}\right)\;\Big/\;\left(\left.6.8541-1.\;r^{2}-1.\;s^{2}\right)^{4}\;\left(2308.24+1.\;r^{8}+r^{7}\;\left(0.0749944-0.284433\;s\right)\right.\right.+\\
                             r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                             r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                        s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                           s \left( -28.8278 + s \left( -0.686583 + 1.05119 \, s \right) \right) \right) \right) \right) -
(163.877 \, r^{11} \, s^4) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284434 \, s) + r^7 (0.074994 - 0.284434 \, s) + r^7 (0.07494 - 0.284434 \, s) + r^7 (0.07494 - 0.284434 \, s) + r^7 (0.07494 - 0.284
                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                             r^{2} (-1329. +
                                                 \hspace{3.5cm} 
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 
                                                                                                        s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                 s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                       s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                           s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
\left(4266.88\,s^{5}\right)\,\left/\,\left(6.8541-1.\,r^{2}-1.\,s^{2}\right)^{4}\,\left(2308.24+1.\,r^{8}+r^{7}\,\left(0.0749944-0.284433\,s\right)\right.\right.\right.
                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
                                                s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                             r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.423864
                                                                                                        s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                              s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                          s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(216\,962.\ r\ s^5) / ((6.8541-1.\ r^2-1.\ s^2)^4 (2308.24+1.\ r^8+r^7\ (0.0749944-0.284433\ s)+
                              r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                             r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                             r^{4} \left(286.959 + s \left(1.67402 + s \left(-84.7941 + s \left(-0.0580727 + 6.26538 \, s\right)\right)\right)\right) + \\
                             r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                             r^2 (-1329. +
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s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                       s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (142613. r^2 s^5)) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (142613. r^2 s^5) / ((6.8541 - 1. r^2 - 1. r^2
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                         r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} \ \left(5.87158 + s \ \left(40.5156 + s \ \left(1.50515 + s \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) \ + \\
                                        r^2 (-1329. +
                                                                   s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 +
                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                       s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
\left(438\,135.\;r^3\,s^5\right)\left/\left(\left(6.8541-1.\;r^2-1.\;s^2\right)^4\,\left(2308.24+1.\;r^8+r^7\,\left(0.0749944-0.284433\,s\right)+1.564433\,s\right)\right.\right.
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                        r^2 (-1329. +
                                                                   s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                        s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                       s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(311074. r^4 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (311074. r^4 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (311074. r^4 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (311074. r^4 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (311074. r^4 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (311074. r^4 s^5) / ((6.8541 - 1. r^4 - 1. r^4 - 1. r^4) / ((6.8541 - 1. r^4 - 1. r^4) / ((6.8541 - 1. r^4 - 1. r^4) / ((6.8541 - 1. r^4) / (6.8541 - 1. r^
                                         r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                         r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.22
                                        r^2 (-1329. +
                                                                   s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                       s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (158780. r^5 s^5) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^7 (0.0749944 - 0.284433 s)) + r^7 (0.0749944 - 0.284433 s) + r^7 (0.074994 - 0.284435 s) + r^7 (0.074994 - 0.28445 s) + r^7 (0.074994 - 0.28445 s) + r^7 (0.074994
                                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                        r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                        r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                        r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                        r^2 (-1329. +
                                                                   s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                        r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444
                                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                         s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
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s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(142\,464.\;r^{6}\;s^{5}\right)\;\Big/\;\left(\;\left(6.8541-1.\;r^{2}-1.\;s^{2}\right)^{4}\;\left(2308.24+1.\;r^{8}+r^{7}\;\left(0.0749944-0.284433\;s\right)\right.\right.+\\
                                    r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                   r^2 (-1329. +
                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                    s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(9419.74\ r^{7}\ s^{5}\right)\ /\ \left(\ \left(6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)\right.\right.+
                                    r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                   r^2 (-1329. +
                                                          s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                            s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                    s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
(21695.5 \, r^8 \, s^5) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^8 +
                                    r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                    r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 
                                   r^2 (-1329. +
                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                   s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
(1613.05 \, r^9 \, s^5) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s)
                                   r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                   r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                   r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                   r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                   r^2 (-1329. +
                                                          s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + c
                                   r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                             s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                    s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                    s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                       r^2 (-1329. +
                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 +
                                                                                    s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                   s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
\left(167.512\ r^{11}\ s^{5}\right)\ /\ \left(\left.6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)\right.+\left.4.864111.\ r^{11}\ s^{11}\right)^{2}
                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                       r^{2} (-1329. +
                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                       s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                  s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
\left(1311.32\,s^{6}\right)\left/\left(6.8541-1.\,r^{2}-1.\,s^{2}\right)^{4}\left(2308.24+1.\,r^{8}+r^{7}\,\left(0.0749944-0.284433\,s\right)+1.666664744335\right)\right.\right.
                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                       r^2 (-1329. +
                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                       r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                   s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                   s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                        r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) \right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \,
                       r^2 (-1329. +
                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                       r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.423864
                                                                                    s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                        s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                  s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(21441.5 r^2 s^6) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + r^7 (0.074994 - 0.284433 s) + r^7 (0.07494 - 0.284433 s) + r^7 (0.07494 - 0.284433 s) + r^7 (0.07494 - 0.28443 s) + r^7 (0.07494 - 0.284443 s) + r^7 (0.07494 - 0.28444 s) + r^7 (0.07494 - 0.28444 s) + r^7 (0.07494 - 0.28444 s) + r^7 (0.074
                        r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                       r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                       r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                       r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                       r^2 (-1329. +
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s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                 s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
 (57519.5 \, \text{r}^3 \, \text{s}^6) \, / \, ((6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 \, (2308.24 + 1. \, \text{r}^8 + \text{r}^7 \, (0.0749944 - 0.284433 \, \text{s})) + (6.8541 - 1. \, \text{r}^8 + 1. \, \text{
                                           r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                           r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} \ \left(5.87158 + s \ \left(40.5156 + s \ \left(1.50515 + s \ \left(-18.3416 + s \ \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) \ + \\
                                          r^2 (-1329. +
                                                                      s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 +
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                 s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
\left(38\,506.4\,r^4\,s^6\right)\,\left/\,\left(\,6.8541\,-\,1.\,\,r^2\,-\,1.\,\,s^2\,\right)^4\,\left(2308.24\,+\,1.\,\,r^8\,+\,r^7\,\left(0.0749944\,-\,0.284433\,s\,\right)\,+\,366.4\,r^4\,s^6\right)\,\right.\right.
                                           r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                          r^2 (-1329. +
                                                                      s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                 s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) -
(28028.6 \, r^5 \, s^6) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284434 \, s)
                                           r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                           r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right)\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.22
                                          r^2 (-1329. +
                                                                      s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                 s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (19\,059.2\,r^6\,s^6) / ((6.8541-1.\,r^2-1.\,s^2)^4 (2308.24+1.\,r^8+r^7\,(0.0749944-0.284433\,s)+1.
                                          r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                          r^2 (-1329. +
                                                                      s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
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s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                        s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                             s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(3103.29 \text{ r}^8 \text{ s}^6) / (6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + 1. \text{ r}^8 + 1. \text{ 
                                 r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^4 (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444 + s (-184.644 + s (-184.6444 + s (-184.6444 + s (-184.6444 + s (-18
                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                             s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right)
\left(21.7154\;r^9\;s^6\right)\left/\left(\left(6.8541-1.\;r^2-1.\;s^2\right)^4\;\left(2308.24+1.\;r^8+r^7\;\left(0.0749944-0.284433\;s\right)\right.\right.\right.\right.
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                  r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 
                                 r^2 (-1329. +
                                                        s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                 r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                       s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                            s(-28.8278 + s(-0.686583 + 1.05119 s)))))) +
\left(121.812\ r^{10}\ s^{6}\right)\ /\ \left(\left.6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)\right.+
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                 r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                 r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                 r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                 r^2 (-1329. +
                                                       s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right) + s \left(-67.2378 + s \left(586.163 + s \left(17.0677 + s \left(-86.022 + s \left(-1.05891 + 4.20947 s\right)\right)\right)\right)\right)\right)
                                 r \ \big(-11.7828 + s \ \big(-184.642 + s \ \big(-0.423864 + s \ \big(103.159 +
                                                                                                                       s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                  s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                            s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(359.938 \, s^7) / (6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284433 \, s)
                                  r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
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r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.64
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
(10430. \text{ r s}^7) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (1.8541 - 1. \text{ r}^8 + 1.
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                              r^{2} (-1329. +
                                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 + s (
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                              s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
\left(8400.77\ r^{2}\ s^{7}\right)\ /\ \left(\ \left(6.8541-1.\ r^{2}-1.\ s^{2}\right)^{4}\ \left(2308.24+1.\ r^{8}+r^{7}\ \left(0.0749944-0.284433\ s\right)\right)\ +\ \left(8400.77\ r^{2}\ s^{7}\right)\ /\ \left(8400.77\ r^{2}\ s^{7}\right)\ /\ \left(8400.77\ r^{2}\ s^{7}\right)\ /\ \left(8400.749944-8.284433\ s\right)\ +\ (8400.749944-8.284433\ s)\ +\ (8400.749944-8.284433)\ s)\ +\ (8400.749944-8.284433)\ s)\ +\ (8400.749944-8.284433)\ s)\ +\ (8400.749944-8.28443)\ s)\ +\ (8400.749944-8.28443
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                              r^2 (-1329. +
                                                                            s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6
                                                                                                                                                                 s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                                s (-28.8278 + s (-0.686583 + 1.05119 s)))))) +
 (20335.4 \, \text{r}^3 \, \text{s}^7) / ((6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s}) + (20335.4 \, \text{r}^3 \, \text{s}^7) / (6.8541 - 1. \, \text{r}^2 - 1. \, \text{s}^2)^4 (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + \text{r}^7 (0.0749944 - 0.284433 \, \text{s})) + (2308.24 + 1. \, \text{r}^8 + 
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                               r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) \right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \,
                                              r^2 (-1329. +
                                                                           s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                              r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-0.423864 + s (-0.423864 + s (-0.423864
                                                                                                                                                                  s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                               s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                              s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (16242.7 r^4 s^7) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s) + (16242.7 r^4 s^7)) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (16242.7 r^4 s^7) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (16242.7 r^4 s^7) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (16242.7 r^4 s^7) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (16242.7 r^4 s^7) / ((6.8541 - 1. r^2 - 1. s^2)^4 (2308.24 + 1. r^8 + r^7 (0.0749944 - 0.284433 s)) + (16242.7 r^4 s^7) / ((6.8541 - 1. r^4 - 1. r^4
                                               r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                              r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                              r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                              r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                              r^2 (-1329. +
```

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 \hspace{3.5cm} s \hspace{.1cm} \left(\hspace{.1cm} - 67.2378 + s \hspace{.1cm} \left(\hspace{.1cm} 586.163 + s \hspace{.1cm} \left(\hspace{.1cm} 17.0677 + s \hspace{.1cm} \left(\hspace{.1cm} - 86.022 + s \hspace{.1cm} \left(\hspace{.1cm} - 1.05891 + 4.20947 \hspace{.1cm} s\hspace{.1cm} \right)\hspace{.1cm} \right)\hspace{.1cm} \right)\hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} \right) \hspace{.1cm} + \hspace{.1cm} \left(\hspace{.1cm} - 2378 + s \hspace{.1cm} \right) \hspace
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(104.642 + s \left(104.644 + s (104.644 + s (104
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                  s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (5225.99 \text{ r}^5 \text{ s}^7) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (6.8541 - 1. \text{ r}^8 + \text{r}^7))
                                          r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                           r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                          r^2 (-1329. +
                                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))) +
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                  s \left(-28.8278 + s \left(-0.686583 + 1.05119 s\right)\right)\right)\right) +
 (6111.06 \text{ r}^6 \text{ s}^7) / ((6.8541 - 1. \text{ r}^2 - 1. \text{ s}^2)^4 (2308.24 + 1. \text{ r}^8 + \text{r}^7 (0.0749944 - 0.284433 \text{ s}) + (6111.06 \text{ r}^6 \text{ s}^7))
                                          r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                                          r^2 (-1329. +
                                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s)))))) +
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                  s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} \ \left( -1.11986 + s \ \left( -0.0312747 + \left( -0.18738 + 0.480139 \ s \right) \ s \right) \right) \ +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                           r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(40.5156 + s \left(1.50515 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right)\right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) \right) + r^{3} \left(5.87158 + s \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) \right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-18.3416 + s \left(-0.228601 + 1.81358 \, s\right)\right) + r^{3} \left(-0.228601 + 1.81358 \, s\right) + r^{2} \left(-0.228601 + 1.81358 \, s\right) + r^
                                          r^2 (-1329. +
                                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s \left(-0.423864 + s \left(-184.642 + s \left(-0.423864 + s (-0.423864 +
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                                                                  s (-28.8278 + s (-0.686583 + 1.05119 s)))))) -
 (524.616 \, r^8 \, s^7) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.074994 - 0.284434 \, s)) + r^7 (0.074994 - 0.284434 \, s)
                                          r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                          r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                          r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                          r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s))))) +
                                          r^2 (-1329. +
                                                                       s(-67.2378 + s(586.163 + s(17.0677 + s(-86.022 + s(-1.05891 + 4.20947 s))))))
                                          r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s \left(-184.642 + s (-184.642 + s (-184.644 + s (-184.6444
                                                                                                                                                      s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s)))))) +
                                           s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
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```
s (-28.8278 + s (-0.686583 + 1.05119 s))))))) +
(96.9983 \, r^9 \, s^7) / ((6.8541 - 1. \, r^2 - 1. \, s^2)^4 (2308.24 + 1. \, r^8 + r^7 (0.0749944 - 0.284433 \, s) + r^7 (0.0749944 - 0.284433 \, s)) + r^7 (0.0749944 - 0.284433 \, s)
                                r^{6} (-27.5999 + s (0.314255 + 4.10709 s)) +
                                r^{5} (-1.11986 + s (-0.0312747 + (-0.18738 + 0.480139 s) s)) +
                                r^{4} (286.959 + s (1.67402 + s (-84.7941 + s (-0.0580727 + 6.26538 s)))) +
                                r^{3} (5.87158 + s (40.5156 + s (1.50515 + s (-18.3416 + s (-0.228601 + 1.81358 s)))) +
                               r^2 (-1329. +
                                                      s (-67.2378 + s (586.163 + s (17.0677 + s (-86.022 + s (-1.05891 + 4.20947 s))))) +
                                r \left(-11.7828 + s \left(-184.642 + s \left(-0.423864 + s \left(103.159 + s (103.159 + s (103
                                                                                                                   s (0.0811638 + s (-18.3103 + s (0.0337737 + 1.04901 s))))))) +
                                s (281.022 + s (-1353.73 + s (-114.256 + s (296.578 + s (15.3937 +
                                                                                                                                       s (-28.8278 + s (-0.686583 + 1.05119 s)))))))
```

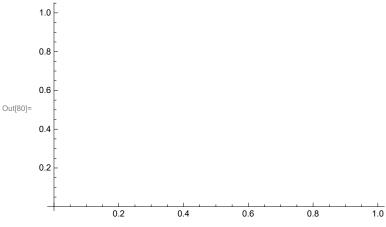
## Elemento 4 nós clássico

#### Funções de Forma e Derivadas

```
In[63]:= n = 4;
    dn1 = \{-(1-s)/4, (1-s)/4, (1+s)/4, -(1+s)/4\};
    dn2 = \{-(1-r)/4, (1-r)/4, (1+r)/4, -(1+r)/4\};
```

### Matriz Jacobiana $(\partial_{\xi} x)$

```
ln[77]:= x = \{x1, x2, x3, x4\};
     y = \{y1, y2, y3, y4\};
     Thread[{x, y}];
     ListPlot[%]
     dxDxi1 = Sum[dn1[[i]] * x[[i]], {i, 1, n}]
     dyDxi1 = Sum[dn1[[i]] * y[[i]], {i, 1, n}]
     dxDxi2 = Sum[dn2[[i]] * x[[i]], {i, 1, n}]
     dyDxi2 = Sum[dn2[[i]] * y[[i]], {i, 1, n}]
     J = {{dxDxi1, dyDxi1}, {dxDxi2, dyDxi2}};
     detJ2 = Det[J] // FullSimplify
     detJ = dxDxi1 * dyDxi2 - dyDxi1 * dxDxi2 // FullSimplify
```



$$\text{Out[81]= } \frac{1}{4} \left(-1+s\right) \ x1+\frac{1}{4} \ \left(1-s\right) \ x2+\frac{1}{4} \ \left(1+s\right) \ x3+\frac{1}{4} \ \left(-1-s\right) \ x4$$

$$\text{Out[82]=} \ \frac{1}{4} \left(-1+s\right) \ y1+\frac{1}{4} \left(1-s\right) \ y2+\frac{1}{4} \left(1+s\right) \ y3+\frac{1}{4} \left(-1-s\right) \ y4$$

$$\text{Out[83]=} \ \frac{1}{4} \ \left(-1+r\right) \ x1 + \frac{1}{4} \ \left(1-r\right) \ x2 + \frac{1}{4} \ \left(1+r\right) \ x3 + \frac{1}{4} \ \left(-1-r\right) \ x4$$

$$\text{Out} [84] = \ \frac{1}{4} \ \left( -1 + r \right) \ y1 + \frac{1}{4} \ \left( 1 - r \right) \ y2 + \frac{1}{4} \ \left( 1 + r \right) \ y3 + \frac{1}{4} \ \left( -1 - r \right) \ y4$$

$$\text{Out[86]=} \ \frac{1}{8} \ \left( \hspace{.05cm} r-s \hspace{.05cm} \right) \ \left( \hspace{.05cm} \left( \hspace{.05cm} x3-x4 \right) \ \left( \hspace{.05cm} y1-y2 \right) \hspace{.05cm} - \hspace{.05cm} \left( \hspace{.05cm} x1-x2 \right) \ \left( \hspace{.05cm} y3-y4 \right) \hspace{.05cm} \right)$$

$$\text{Out}[87] = \ \frac{1}{8} \ \left( \ r-s \right) \ \left( \ \left( x3-x4 \right) \ \left( y1-y2 \right) \ - \ \left( x1-x2 \right) \ \left( y3-y4 \right) \ \right)$$

## $B^{T}.B \det J$

$$\begin{split} & \text{In}[88] = & \ d\text{Ndx} = \frac{1}{\text{detJ}} \left( \text{dyDxi2} * \text{dn1}[[4]] - \text{dyDxi1} * \text{dn2}[[4]] \right); \\ & \ d\text{Ndy} = \frac{1}{\text{detJ}} \left( - \text{dxDxi2} * \text{dn1}[[3]] + \text{dxDxi1} * \text{dn2}[[3]] \right); \\ & \ oi = & \ d\text{Ndx} * \text{dNdy} * \text{detJ} \ / \ \text{FullSimplify} \\ & \ \underbrace{ \left( r - s \right) \left( x1 - x2 \right) \left( y1 - y2 \right)}_{8 \left( \left( x3 - x4 \right) \left( y1 - y2 \right) - \left( x1 - x2 \right) \left( y3 - y4 \right) \right)} \end{split}$$