

The equations below are generated using `Zernike.getEquationString` method.

1 Height (Z)

$$Z_0^0 = 1[1]$$

$$Z_1^{-1} = 2[Y^1]$$

$$Z_1^1 = 2[X^1]$$

$$Z_2^{-2} = \sqrt{6}[2X^1Y^1]$$

$$Z_2^0 = \sqrt{3}[2X^2 + 2Y^2 - 1]$$

$$Z_2^2 = \sqrt{6}[X^2 - Y^2]$$

$$Z_3^{-3} = \sqrt{8}[3X^2Y^1 - Y^3]$$

$$Z_3^{-1} = \sqrt{8}[3X^2Y^1 + 3Y^3 - 2Y^1]$$

$$Z_3^1 = \sqrt{8}[3X^3 + 3X^1Y^2 - 2X^1]$$

$$Z_3^3 = \sqrt{8}[X^3 - 3X^1Y^2]$$

$$Z_4^{-4} = \sqrt{10}[4X^3Y^1 - 4X^1Y^3]$$

$$Z_4^{-2} = \sqrt{10}[8X^3Y^1 + 8X^1Y^3 - 6X^1Y^1]$$

$$Z_4^0 = \sqrt{5}[6X^4 + 12X^2Y^2 + 6Y^4 - 6X^2 - 6Y^2 + 1]$$

$$Z_4^2 = \sqrt{10}[4X^4 - 4Y^4 - 3X^2 + 3Y^2]$$

$$Z_4^4 = \sqrt{10}[X^4 - 6X^2Y^2 + Y^4]$$

$$Z_5^{-5} = \sqrt{12}[5X^4Y^1 - 10X^2Y^3 + Y^5]$$

$$Z_5^{-3} = \sqrt{12}[15X^4Y^1 + 10X^2Y^3 - 5Y^5 - 12X^2Y^1 + 4Y^3]$$

$$Z_5^{-1} = \sqrt{12}[10X^4Y^1 + 20X^2Y^3 + 10Y^5 - 12X^2Y^1 - 12Y^3 + 3Y^1]$$

$$Z_5^1 = \sqrt{12}[10X^5 + 20X^3Y^2 + 10X^1Y^4 - 12X^3 - 12X^1Y^2 + 3X^1]$$

$$Z_5^3 = \sqrt{12}[5X^5 - 10X^3Y^2 - 15X^1Y^4 - 4X^3 + 12X^1Y^2]$$

$$Z_5^5 = \sqrt{12}[X^5 - 10X^3Y^2 + 5X^1Y^4]$$

$$Z_6^{-6} = \sqrt{14}[6X^5Y^1 - 20X^3Y^3 + 6X^1Y^5]$$

$$Z_6^{-4} = \sqrt{14}[24X^5Y^1 - 24X^1Y^5 - 20X^3Y^1 + 20X^1Y^3]$$

$$Z_6^{-2} = \sqrt{14}[30X^5Y^1 + 60X^3Y^3 + 30X^1Y^5 - 40X^3Y^1 - 40X^1Y^3 + 12X^1Y^1]$$

$$Z_6^0 = \sqrt{7}[20X^6 + 60X^4Y^2 + 60X^2Y^4 + 20Y^6 - 30X^4 - 60X^2Y^2 - 30Y^4 + 12X^2 + 12Y^2 - 1]$$

$$Z_6^2 = \sqrt{14}[15X^6 + 15X^4Y^2 - 15X^2Y^4 - 15Y^6 - 20X^4 + 20Y^4 + 6X^2 - 6Y^2]$$

$$Z_6^4 = \sqrt{14}[6X^6 - 30X^4Y^2 - 30X^2Y^4 + 6Y^6 - 5X^4 + 30X^2Y^2 - 5Y^4]$$

$$Z_6^6 = \sqrt{14}[X^6 - 15X^4Y^2 + 15X^2Y^4 - Y^6]$$

$$Z_7^{-7} = 4[7X^6Y^1 - 35X^4Y^3 + 21X^2Y^5 - Y^7]$$

$$Z_7^{-5} = 4[35X^6Y^1 - 35X^4Y^3 - 63X^2Y^5 + 7Y^7 - 30X^4Y^1 + 60X^2Y^3 - 6Y^5]$$

$$Z_7^{-3} = 4[63X^6Y^1 + 105X^4Y^3 + 21X^2Y^5 - 21Y^7 - 90X^4Y^1 - 60X^2Y^3 + 30Y^5 + 30X^2Y^1 - 10Y^3]$$

$$Z_7^{-1} = 4[35X^6Y^1 + 105X^4Y^3 + 105X^2Y^5 + 35Y^7 - 60X^4Y^1 - 120X^2Y^3 - 60Y^5 + 30X^2Y^1 + 30Y^3 - 4Y^1]$$

$$Z_7^1 = 4[35X^7 + 105X^5Y^2 + 105X^3Y^4 + 35X^1Y^6 - 60X^5 - 120X^3Y^2 - 60X^1Y^4 + 30X^3 + 30X^1Y^2 - 4X^1]$$

$$Z_7^3 = 4[21X^7 - 21X^5Y^2 - 105X^3Y^4 - 63X^1Y^6 - 30X^5 + 60X^3Y^2 + 90X^1Y^4 + 10X^3 - 30X^1Y^2]$$

$$Z_7^5 = 4[7X^7 - 63X^5Y^2 - 35X^3Y^4 + 35X^1Y^6 - 6X^5 + 60X^3Y^2 - 30X^1Y^4]$$

$$Z_7^7 = 4[X^7 - 21X^5Y^2 + 35X^3Y^4 - 7X^1Y^6]$$

$$Z_8^{-8} = \sqrt{18}[8X^7Y^1 - 56X^5Y^3 + 56X^3Y^5 - 8X^1Y^7]$$

$$Z_8^{-6} = \sqrt{18}[48X^7Y^1 - 112X^5Y^3 - 112X^3Y^5 + 48X^1Y^7 - 42X^5Y^1 + 140X^3Y^3 - 42X^1Y^5]$$

$$Z_8^{-4} = \sqrt{18}[112X^7Y^1 + 112X^5Y^3 - 112X^3Y^5 - 112X^1Y^7 - 168X^5Y^1 + 168X^1Y^5 + 60X^3Y^1 - 60X^1Y^3]$$

$$Z_8^{-2} = \sqrt{18}[112X^7Y^1 + 336X^5Y^3 + 336X^3Y^5 + 112X^1Y^7 - 210X^5Y^1 - 420X^3Y^3 - 210X^1Y^5 + 120X^3Y^1 + 120X^1Y^3 - 20X^1Y^1]$$

$$Z_8^0 = 3[70X^8 + 280X^6Y^2 + 420X^4Y^4 + 280X^2Y^6 + 70Y^8 - 140X^6 - 420X^4Y^2 - 420X^2Y^4 - 140Y^6 + 90X^4 + 180X^2Y^2 + 90Y^4 - 20X^2 - 20Y^2 + 1]$$

$$Z_8^2 = \sqrt{18}[56X^8 + 112X^6Y^2 - 112X^2Y^6 - 56Y^8 - 105X^6 - 105X^4Y^2 + 105X^2Y^4 + 105Y^6 + 60X^4 - 60Y^4 - 10X^2 + 10Y^2]$$

$$Z_8^4 = \sqrt{18}[28X^8 - 112X^6Y^2 - 280X^4Y^4 - 112X^2Y^6 + 28Y^8 - 42X^6 + 210X^4Y^2 + 210X^2Y^4 - 42Y^6 + 15X^4 - 90X^2Y^2 + 15Y^4]$$

$$Z_8^6 = \sqrt{18}[8X^8 - 112X^6Y^2 + 112X^2Y^6 - 8Y^8 - 7X^6 + 105X^4Y^2 - 105X^2Y^4 + 7Y^6]$$

$$Z_8^8 = \sqrt{18}[X^8 - 28X^6Y^2 + 70X^4Y^4 - 28X^2Y^6 + Y^8]$$

$$Z_9^{-9} = \sqrt{20}[9X^8Y^1 - 84X^6Y^3 + 126X^4Y^5 - 36X^2Y^7 + Y^9]$$

$$Z_9^{-7} = \sqrt{20}[63X^8Y^1 - 252X^6Y^3 - 126X^4Y^5 + 180X^2Y^7 - 9Y^9 - 56X^6Y^1 + 280X^4Y^3 - 168X^2Y^5 + 8Y^7]$$

$$Z_9^{-5} = \sqrt{20}[180X^8Y^1 - 504X^4Y^5 - 288X^2Y^7 + 36Y^9 - 280X^6Y^1 + 280X^4Y^3 + 504X^2Y^5 - 56Y^7 + 105X^4Y^1 - 210X^2Y^3 + 21Y^5]$$

$$Z_9^{-3} = \sqrt{20}[252X^8Y^1 + 672X^6Y^3 + 504X^4Y^5 - 84Y^9 - 504X^6Y^1 - 840X^4Y^3 - 168X^2Y^5 + 168Y^7 + 315X^4Y^1 + 210X^2Y^3 - 105Y^5 - 60X^2Y^1 + 20Y^3]$$

$$Z_9^{-1} = \sqrt{20}[126X^8Y^1 + 504X^6Y^3 + 756X^4Y^5 + 504X^2Y^7 + 126Y^9 - 280X^6Y^1 - 840X^4Y^3 - 840X^2Y^5 - 280Y^7 + 210X^4Y^1 + 420X^2Y^3 + 210Y^5 - 60X^2Y^1 - 60Y^3 + 5Y^1]$$

$$Z_9^1 = \sqrt{20}[126X^9 + 504X^7Y^2 + 756X^5Y^4 + 504X^3Y^6 + 126X^1Y^8 - 280X^7 - 840X^5Y^2 - 840X^3Y^4 - 280X^1Y^6 + 210X^5 + 420X^3Y^2 + 210X^1Y^4 - 60X^3 - 60X^1Y^2 + 5X^1]$$

$$Z_9^3 = \sqrt{20}[84X^9 - 504X^5Y^4 - 672X^3Y^6 - 252X^1Y^8 - 168X^7 + 168X^5Y^2 + 840X^3Y^4 + 504X^1Y^6 + 105X^5 - 210X^3Y^2 - 315X^1Y^4 - 20X^3 + 60X^1Y^2]$$

$$Z_9^5 = \sqrt{20}[36X^9 - 288X^7Y^2 - 504X^5Y^4 + 180X^1Y^8 - 56X^7 + 504X^5Y^2 + 280X^3Y^4 - 280X^1Y^6 + 21X^5 - 210X^3Y^2 + 105X^1Y^4]$$

$$Z_9^7 = \sqrt{20}[9X^9 - 180X^7Y^2 + 126X^5Y^4 + 252X^3Y^6 - 63X^1Y^8 - 8X^7 + 168X^5Y^2 - 280X^3Y^4 + 56X^1Y^6]$$

$$Z_9^9 = \sqrt{20}[X^9 - 36X^7Y^2 + 126X^5Y^4 - 84X^3Y^6 + 9X^1Y^8]$$

$$Z_{10}^{-10} = \sqrt{22}[10X^9Y^1 - 120X^7Y^3 + 252X^5Y^5 - 120X^3Y^7 + 10X^1Y^9]$$

$$Z_{10}^{-8} = \sqrt{22}[80X^9Y^1 - 480X^7Y^3 + 480X^3Y^7 - 80X^1Y^9 - 72X^7Y^1 + 504X^5Y^3 - 504X^3Y^5 + 72X^1Y^7]$$

$$Z_{10}^{-6} = \sqrt{22}[270X^9Y^1 - 360X^7Y^3 - 1260X^5Y^5 - 360X^3Y^7 + 270X^1Y^9 - 432X^7Y^1 + 1008X^5Y^3 + 1008X^3Y^5 - 432X^1Y^7 + 168X^5Y^1 - 560X^3Y^3 + 168X^1Y^5]$$

$$Z_{10}^{-4} = \sqrt{22}[480X^9Y^1 + 960X^7Y^3 - 960X^3Y^7 - 480X^1Y^9 - 1008X^7Y^1 - 1008X^5Y^3 + 1008X^3Y^5 + 1008X^1Y^7 + 672X^5Y^1 - 672X^1Y^5 - 140X^3Y^1 + 140X^1Y^3]$$

$$Z_{10}^{-2} = \sqrt{22}[420X^9Y^1 + 1680X^7Y^3 + 2520X^5Y^5 + 1680X^3Y^7 + 420X^1Y^9 - 1008X^7Y^1 - 3024X^5Y^3 - 3024X^3Y^5 - 1008X^1Y^7 + 840X^5Y^1 + 1680X^3Y^3 + 840X^1Y^5 - 280X^3Y^1 - 280X^1Y^3 + 30X^1Y^1]$$

$$Z_{10}^0 = \sqrt{11}[252X^{10} + 1260X^8Y^2 + 2520X^6Y^4 + 2520X^4Y^6 + 1260X^2Y^8 + 252Y^{10} - 630X^8 - 2520X^6Y^2 - 3780X^4Y^4 - 2520X^2Y^6 - 630Y^8 + 560X^6 + 1680X^4Y^2 + 1680X^2Y^4 + 560Y^6 - 210X^4 - 420X^2Y^2 - 210Y^4 + 30X^2 + 30Y^2 - 1]$$

$$Z_{10}^2 = \sqrt{22}[210X^{10} + 630X^8Y^2 + 420X^6Y^4 - 420X^4Y^6 - 630X^2Y^8 - 210Y^{10} - 504X^8 - 1008X^6Y^2 + 1008X^2Y^6 + 504Y^8 + 420X^6 + 420X^4Y^2 - 420X^2Y^4 - 420Y^6 - 140X^4 + 140Y^4 + 15X^2 - 15Y^2]$$

$$Z_{10}^4 = \sqrt{22}[120X^{10} - 360X^8Y^2 - 1680X^6Y^4 - 1680X^4Y^6 - 360X^2Y^8 + 120Y^{10} - 252X^8 + 1008X^6Y^2 + 2520X^4Y^4 + 1008X^2Y^6 - 252Y^8 + 168X^6 - 840X^4Y^2 - 840X^2Y^4 + 168Y^6 - 35X^4 + 210X^2Y^2 - 35Y^4]$$

$$Z_{10}^6 = \sqrt{22}[45X^{10} - 585X^8Y^2 - 630X^6Y^4 + 630X^4Y^6 + 585X^2Y^8 - 45Y^{10} - 72X^8 + 1008X^6Y^2 - 1008X^2Y^6 + 72Y^8 + 28X^6 - 420X^4Y^2 + 420X^2Y^4 - 28Y^6]$$

$$Z_{10}^8 = \sqrt{22}[10X^{10} - 270X^8Y^2 + 420X^6Y^4 + 420X^4Y^6 - 270X^2Y^8 + 10Y^{10} - 9X^8 + 252X^6Y^2 - 630X^4Y^4 + 252X^2Y^6 - 9Y^8]$$

$$Z_{10}^{10} = \sqrt{22}[X^{10} - 45X^8Y^2 + 210X^6Y^4 - 210X^4Y^6 + 45X^2Y^8 - Y^{10}]$$

$$Z_{11}^{-11} = \sqrt{24}[11X^{10}Y^1 - 165X^8Y^3 + 462X^6Y^5 - 330X^4Y^7 + 55X^2Y^9 - Y^{11}]$$

$$Z_{11}^{-9} = \sqrt{24}[99X^{10}Y^1 - 825X^8Y^3 + 462X^6Y^5 + 990X^4Y^7 - 385X^2Y^9 + 11Y^{11} - 90X^8Y^1 + 840X^6Y^3 - 1260X^4Y^5 + 360X^2Y^7 - 10Y^9]$$

$$Z_{11}^{-7} = \sqrt{24}[385X^{10}Y^1 - 1155X^8Y^3 - 2310X^6Y^5 + 330X^4Y^7 + 1045X^2Y^9 - 55Y^{11} - 630X^8Y^1 + 2520X^6Y^3 + 1260X^4Y^5 - 1800X^2Y^7 + 90Y^9 + 252X^6Y^1 - 1260X^4Y^3 + 756X^2Y^5 - 36Y^7]$$

$$Z_{11}^{-5} = \sqrt{24}[825X^{10}Y^1 + 825X^8Y^3 - 2310X^6Y^5 - 3630X^4Y^7 - 1155X^2Y^9 + 165Y^{11} - 1800X^8Y^1 + 5040X^4Y^5 + 2880X^2Y^7 - 360Y^9 + 1260X^6Y^1 - 1260X^4Y^3 - 2268X^2Y^5 + 252Y^7 - 280X^4Y^1 + 560X^2Y^3 - 56Y^5]$$

$$Z_{11}^{-3} = \sqrt{24}[990X^{10}Y^1 + 3630X^8Y^3 + 4620X^6Y^5 + 1980X^4Y^7 - 330X^2Y^9 - 330Y^{11} - 2520X^8Y^1 - 6720X^6Y^3 - 5040X^4Y^5 + 840Y^9 + 2268X^6Y^1 + 3780X^4Y^3 + 756X^2Y^5 - 756Y^7 - 840X^4Y^1 - 560X^2Y^3 + 280Y^5 + 105X^2Y^1 - 35Y^3]$$

$$Z_{11}^{-1} = \sqrt{24}[462X^{10}Y^1 + 2310X^8Y^3 + 4620X^6Y^5 + 4620X^4Y^7 + 2310X^2Y^9 + 462Y^{11} - 1260X^8Y^1 - 5040X^6Y^3 - 7560X^4Y^5 - 5040X^2Y^7 - 1260Y^9 + 1260X^6Y^1 + 3780X^4Y^3 + 3780X^2Y^5 + 1260Y^7 - 560X^4Y^1 - 1120X^2Y^3 - 560Y^5 + 105X^2Y^1 + 105Y^3 - 6Y^1]$$

$$Z_{11}^1 = \sqrt{24}[462X^{11} + 2310X^9Y^2 + 4620X^7Y^4 + 4620X^5Y^6 + 2310X^3Y^8 + 462X^1Y^{10} - 1260X^9 - 5040X^7Y^2 - 7560X^5Y^4 - 5040X^3Y^6 - 1260X^1Y^8 + 1260X^7 + 3780X^5Y^2 + 3780X^3Y^4 + 1260X^1Y^6 - 560X^5 - 1120X^3Y^2 - 560X^1Y^4 + 105X^3 + 105X^1Y^2 - 6X^1]$$

$$Z_{11}^3 = \sqrt{24}[330X^{11} + 330X^9Y^2 - 1980X^7Y^4 - 4620X^5Y^6 - 3630X^3Y^8 - 990X^1Y^{10} - 840X^9 + 5040X^5Y^4 + 6720X^3Y^6 + 2520X^1Y^8 + 756X^7 - 756X^5Y^2 - 3780X^3Y^4 - 2268X^1Y^6 - 280X^5 + 560X^3Y^2 + 840X^1Y^4 + 35X^3 - 105X^1Y^2]$$

$$Z_{11}^5 = \sqrt{24}[165X^{11} - 1155X^9Y^2 - 3630X^7Y^4 - 2310X^5Y^6 + 825X^3Y^8 + 825X^1Y^{10} - 360X^9 + 2880X^7Y^2 + 5040X^5Y^4 - 1800X^1Y^8 + 252X^7 - 2268X^5Y^2 - 1260X^3Y^4 + 1260X^1Y^6 - 56X^5 + 560X^3Y^2 - 280X^1Y^4]$$

$$Z_{11}^7 = \sqrt{24}[55X^{11} - 1045X^9Y^2 - 330X^7Y^4 + 2310X^5Y^6 + 1155X^3Y^8 - 385X^1Y^{10} - 90X^9 + 1800X^7Y^2 - 1260X^5Y^4 - 2520X^3Y^6 + 630X^1Y^8 + 36X^7 - 756X^5Y^2 + 1260X^3Y^4 - 252X^1Y^6]$$

$$Z_{11}^9 = \sqrt{24}[11X^{11} - 385X^9Y^2 + 990X^7Y^4 + 462X^5Y^6 - 825X^3Y^8 + 99X^1Y^{10} - 10X^9 + 360X^7Y^2 - 1260X^5Y^4 + 840X^3Y^6 - 90X^1Y^8]$$

$$Z_{11}^{11} = \sqrt{24}[X^{11} - 55X^9Y^2 + 330X^7Y^4 - 462X^5Y^6 + 165X^3Y^8 - 11X^1Y^{10}]$$

$$Z_{12}^{-12} = \sqrt{26}[12X^{11}Y^1 - 220X^9Y^3 + 792X^7Y^5 - 792X^5Y^7 + 220X^3Y^9 - 12X^1Y^{11}]$$

$$Z_{12}^{-10} = \sqrt{26}[120X^{11}Y^1 - 1320X^9Y^3 + 1584X^7Y^5 + 1584X^5Y^7 - 1320X^3Y^9 + 120X^1Y^{11} - 110X^9Y^1 + 1320X^7Y^3 - 2772X^5Y^5 + 1320X^3Y^7 - 110X^1Y^9]$$

$$Z_{12}^{-8} = \sqrt{26}[528X^{11}Y^1 - 2640X^9Y^3 - 3168X^7Y^5 + 3168X^5Y^7 + 2640X^3Y^9 - 528X^1Y^{11} - 880X^9Y^1 + 5280X^7Y^3 - 5280X^3Y^7 + 880X^1Y^9 + 360X^7Y^1 - 2520X^5Y^3 + 2520X^3Y^5 - 360X^1Y^7]$$

$$Z_{12}^{-6} = \sqrt{26}[1320X^{11}Y^1 - 440X^9Y^3 - 7920X^7Y^5 - 7920X^5Y^7 - 440X^3Y^9 + 1320X^1Y^{11} - 2970X^9Y^1 + 3960X^7Y^3 + 13860X^5Y^5 + 3960X^3Y^7 - 2970X^1Y^9 + 2160X^7Y^1 - 5040X^5Y^3 - 5040X^3Y^5 + 2160X^1Y^7 - 504X^5Y^1 + 1680X^3Y^3 - 504X^1Y^5]$$

$$Z_{12}^{-4} = \sqrt{26}[1980X^{11}Y^1 + 5940X^9Y^3 + 3960X^7Y^5 - 3960X^5Y^7 - 5940X^3Y^9 - 1980X^1Y^{11} - 5280X^9Y^1 - 10560X^7Y^3 + 10560X^3Y^7 + 5280X^1Y^9 + 5040X^7Y^1 + 5040X^5Y^3 - 5040X^3Y^5 - 5040X^1Y^7 - 2016X^5Y^1 + 2016X^1Y^5 + 280X^3Y^1 - 280X^1Y^3]$$

$$Z_{12}^{-2} = \sqrt{26}[1584X^{11}Y^1 + 7920X^9Y^3 + 15840X^7Y^5 + 15840X^5Y^7 + 7920X^3Y^9 + 1584X^1Y^{11} - 4620X^9Y^1 - 18480X^7Y^3 - 27720X^5Y^5 - 18480X^3Y^7 - 4620X^1Y^9 + 5040X^7Y^1 + 15120X^5Y^3 + 15120X^3Y^5 + 5040X^1Y^7 - 2520X^5Y^1 - 5040X^3Y^3 - 2520X^1Y^5 + 560X^3Y^1 + 560X^1Y^3 - 42X^1Y^1]$$

$$Z_{12}^0 = \sqrt{13}[924X^{12} + 5544X^{10}Y^2 + 13860X^8Y^4 + 18480X^6Y^6 + 13860X^4Y^8 + 5544X^2Y^{10} + 924Y^{12} - 2772X^{10} - 13860X^8Y^2 - 27720X^6Y^4 - 27720X^4Y^6 - 13860X^2Y^8 - 2772Y^{10} + 3150X^8 + 12600X^6Y^2 + 18900X^4Y^4 + 12600X^2Y^6 + 3150Y^8 - 1680X^6 - 5040X^4Y^2 - 5040X^2Y^4 - 1680Y^6 + 420X^4 + 840X^2Y^2 + 420Y^4 - 42X^2 - 42Y^2 + 1]$$

$$Z_{12}^2 = \sqrt{26}[792X^{12} + 3168X^{10}Y^2 + 3960X^8Y^4 - 3960X^4Y^8 - 3168X^2Y^{10} - 792Y^{12} - 2310X^{10} - 6930X^8Y^2 - 4620X^6Y^4 + 4620X^4Y^6 + 6930X^2Y^8 + 2310Y^{10} + 2520X^8 + 5040X^6Y^2 - 5040X^2Y^6 - 2520Y^8 - 1260X^6 - 1260X^4Y^2 + 1260X^2Y^4 + 1260Y^6 + 280X^4 - 280Y^4 - 21X^2 + 21Y^2]$$

$$Z_{12}^4 = \sqrt{26}[495X^{12} - 990X^{10}Y^2 - 8415X^8Y^4 - 13860X^6Y^6 - 8415X^4Y^8 - 990X^2Y^{10} + 495Y^{12} - 1320X^{10} + 3960X^8Y^2 + 18480X^6Y^4 + 18480X^4Y^6 + 3960X^2Y^8 - 1320Y^{10} + 1260X^8 - 5040X^6Y^2 - 12600X^4Y^4 - 5040X^2Y^6 + 1260Y^8 - 504X^6 + 2520X^4Y^2 + 2520X^2Y^4 - 504Y^6 + 70X^4 - 420X^2Y^2 + 70Y^4]$$

$$Z_{12}^6 = \sqrt{26}[220X^{12} - 2640X^{10}Y^2 - 5940X^8Y^4 + 5940X^4Y^8 + 2640X^2Y^{10} - 220Y^{12} - 495X^{10} + 6435X^8Y^2 + 6930X^6Y^4 - 6930X^4Y^6 - 6435X^2Y^8 + 495Y^{10} + 360X^8 - 5040X^6Y^2 + 5040X^2Y^6 - 360Y^8 - 84X^6 + 1260X^4Y^2 - 1260X^2Y^4 + 84Y^6]$$

$$Z_{12}^8 = \sqrt{26}[66X^{12} - 1716X^{10}Y^2 + 990X^8Y^4 + 5544X^6Y^6 + 990X^4Y^8 - 1716X^2Y^{10} + 66Y^{12} - 110X^{10} + 2970X^8Y^2 - 4620X^6Y^4 - 4620X^4Y^6 + 2970X^2Y^8 - 110Y^{10} + 45X^8 - 1260X^6Y^2 + 3150X^4Y^4 - 1260X^2Y^6 + 45Y^8]$$

$$Z_{12}^{10} = \sqrt{26}[12X^{12} - 528X^{10}Y^2 + 1980X^8Y^4 - 1980X^4Y^8 + 528X^2Y^{10} - 12Y^{12} - 11X^{10} + 495X^8Y^2 - 2310X^6Y^4 + 2310X^4Y^6 - 495X^2Y^8 + 11Y^{10}]$$

$$Z_{12}^{12} = \sqrt{26}[X^{12} - 66X^{10}Y^2 + 495X^8Y^4 - 924X^6Y^6 + 495X^4Y^8 - 66X^2Y^{10} + Y^{12}]$$

$$Z_{13}^{-13} = \sqrt{28}[13X^{12}Y^1 - 286X^{10}Y^3 + 1287X^8Y^5 - 1716X^6Y^7 + 715X^4Y^9 - 78X^2Y^{11} + Y^{13}]$$

$$Z_{13}^{-11} = \sqrt{28}[143X^{12}Y^1 - 2002X^{10}Y^3 + 3861X^8Y^5 + 1716X^6Y^7 - 3575X^4Y^9 + 702X^2Y^{11} - 13Y^{13} - 132X^{10}Y^1 + 1980X^8Y^3 - 5544X^6Y^5 + 3960X^4Y^7 - 660X^2Y^9 + 12Y^{11}]$$

$$Z_{13}^{-9} = \sqrt{28}[702X^{12}Y^1 - 5148X^{10}Y^3 - 2574X^8Y^5 + 10296X^6Y^7 + 4290X^4Y^9 - 2652X^2Y^{11} + 78Y^{13} - 1188X^{10}Y^1 + 9900X^8Y^3 - 5544X^6Y^5 - 11880X^4Y^7 + 4620X^2Y^9 - 132Y^{11} + 495X^8Y^1 - 4620X^6Y^3 + 6930X^4Y^5 - 1980X^2Y^7 + 55Y^9]$$

$$Z_{13}^{-7} = \sqrt{28}[2002X^{12}Y^1 - 4004X^{10}Y^3 - 18018X^8Y^5 - 10296X^6Y^7 + 7150X^4Y^9 + 5148X^2Y^{11} - 286Y^{13} - 4620X^{10}Y^1 + 13860X^8Y^3 + 27720X^6Y^5 - 3960X^4Y^7 - 12540X^2Y^9 + 660Y^{11} + 3465X^8Y^1 - 13860X^6Y^3 - 6930X^4Y^5 + 9900X^2Y^7 - 495Y^9 - 840X^6Y^1 + 4200X^4Y^3 - 2520X^2Y^5 + 120Y^7]$$

$$Z_{13}^{-5} = \sqrt{28}[3575X^{12}Y^1 + 7150X^{10}Y^3 - 6435X^8Y^5 - 25740X^6Y^7 - 20735X^4Y^9 - 4290X^2Y^{11} + 715Y^{13} - 9900X^{10}Y^1 - 9900X^8Y^3 + 27720X^6Y^5 + 43560X^4Y^7 + 13860X^2Y^9 - 1980Y^{11} + 9900X^8Y^1 - 27720X^4Y^5 - 15840X^2Y^7 + 1980Y^9 - 4200X^6Y^1 + 4200X^4Y^3 + 7560X^2Y^5 - 840Y^7 + 630X^4Y^1 - 1260X^2Y^3 + 126Y^5]$$

$$Z_{13}^{-3} = \sqrt{28}[3861X^{12}Y^1 + 18018X^{10}Y^3 + 32175X^8Y^5 + 25740X^6Y^7 + 6435X^4Y^9 - 2574X^2Y^{11} - 1287Y^{13} - 11880X^{10}Y^1 - 43560X^8Y^3 - 55440X^6Y^5 - 23760X^4Y^7 + 3960X^2Y^9 + 3960Y^{11} + 13860X^8Y^1 + 36960X^6Y^3 + 27720X^4Y^5 - 4620Y^9 - 7560X^6Y^1 - 12600X^4Y^3 - 2520X^2Y^5 + 2520Y^7 + 1890X^4Y^1 + 1260X^2Y^3 - 630Y^5 - 168X^2Y^1 + 56Y^3]$$

$$Z_{13}^{-1} = \sqrt{28}[1716X^{12}Y^1 + 10296X^{10}Y^3 + 25740X^8Y^5 + 34320X^6Y^7 + 25740X^4Y^9 + 10296X^2Y^{11} + 1716Y^{13} - 5544X^{10}Y^1 - 27720X^8Y^3 - 55440X^6Y^5 - 55440X^4Y^7 - 27720X^2Y^9 - 5544Y^{11} + 6930X^8Y^1 + 27720X^6Y^3 + 41580X^4Y^5 + 27720X^2Y^7 + 6930Y^9 - 4200X^6Y^1 - 12600X^4Y^3 - 12600X^2Y^5 - 4200Y^7 + 1260X^4Y^1 + 2520X^2Y^3 + 1260Y^5 - 168X^2Y^1 - 168Y^3 + 7Y^1]$$

$$Z_{13}^1 = \sqrt{28}[1716X^{13} + 10296X^{11}Y^2 + 25740X^9Y^4 + 34320X^7Y^6 + 25740X^5Y^8 + 10296X^3Y^{10} + 1716X^1Y^{12} - 5544X^{11} - 27720X^9Y^2 - 55440X^7Y^4 - 55440X^5Y^6 - 27720X^3Y^8 - 5544X^1Y^{10} + 6930X^9 + 27720X^7Y^2 + 41580X^5Y^4 + 27720X^3Y^6 + 6930X^1Y^8 - 4200X^7 - 12600X^5Y^2 - 12600X^3Y^4 - 4200X^1Y^6 + 1260X^5 + 2520X^3Y^2 + 1260X^1Y^4 - 168X^3 - 168X^1Y^2 + 7X^1]$$

$$Z_{13}^3 = \sqrt{28}[1287X^{13} + 2574X^{11}Y^2 - 6435X^9Y^4 - 25740X^7Y^6 - 32175X^5Y^8 - 18018X^3Y^{10} - 3861X^1Y^{12} - 3960X^{11} - 3960X^9Y^2 + 23760X^7Y^4 + 55440X^5Y^6 + 43560X^3Y^8 + 11880X^1Y^{10} + 4620X^9 - 27720X^5Y^4 - 36960X^3Y^6 - 13860X^1Y^8 - 2520X^7 + 2520X^5Y^2 + 12600X^3Y^4 + 7560X^1Y^6 + 630X^5 - 1260X^3Y^2 - 1890X^1Y^4 - 56X^3 + 168X^1Y^2]$$

$$Z_{13}^5 = \sqrt{28}[715X^{13} - 4290X^{11}Y^2 - 20735X^9Y^4 - 25740X^7Y^6 - 6435X^5Y^8 + 7150X^3Y^{10} + 3575X^1Y^{12} - 1980X^{11} + 13860X^9Y^2 + 43560X^7Y^4 + 27720X^5Y^6 - 9900X^3Y^8 - 9900X^1Y^{10} + 1980X^9 - 15840X^7Y^2 - 27720X^5Y^4 + 9900X^1Y^8 - 840X^7 + 7560X^5Y^2 + 4200X^3Y^4 - 4200X^1Y^6 + 126X^5 - 1260X^3Y^2 + 630X^1Y^4]$$

$$Z_{13}^7 = \sqrt{28}[286X^{13} - 5148X^{11}Y^2 - 7150X^9Y^4 + 10296X^7Y^6 + 18018X^5Y^8 + 4004X^3Y^{10} - 2002X^1Y^{12} - 660X^{11} + 12540X^9Y^2 + 3960X^7Y^4 - 27720X^5Y^6 - 13860X^3Y^8 + 4620X^1Y^{10} + 495X^9 - 9900X^7Y^2 + 6930X^5Y^4 + 13860X^3Y^6 - 3465X^1Y^8 - 120X^7 + 2520X^5Y^2 - 4200X^3Y^4 + 840X^1Y^6]$$

$$Z_{13}^9 = \sqrt{28}[78X^{13} - 2652X^{11}Y^2 + 4290X^9Y^4 + 10296X^7Y^6 - 2574X^5Y^8 - 5148X^3Y^{10} + 702X^1Y^{12} - 132X^{11} + 4620X^9Y^2 - 11880X^7Y^4 - 5544X^5Y^6 + 9900X^3Y^8 - 1188X^1Y^{10} + 55X^9 - 1980X^7Y^2 + 6930X^5Y^4 - 4620X^3Y^6 + 495X^1Y^8]$$

$$Z_{13}^{11} = \sqrt{28}[13X^{13} - 702X^{11}Y^2 + 3575X^9Y^4 - 1716X^7Y^6 - 3861X^5Y^8 + 2002X^3Y^{10} - 143X^1Y^{12} - 12X^{11} + 660X^9Y^2 - 3960X^7Y^4 + 5544X^5Y^6 - 1980X^3Y^8 + 132X^1Y^{10}]$$

$$Z_{13}^{13} = \sqrt{28}[X^{13} - 78X^{11}Y^2 + 715X^9Y^4 - 1716X^7Y^6 + 1287X^5Y^8 - 286X^3Y^{10} + 13X^1Y^{12}]$$

$$Z_{14}^{-14} = \sqrt{30}[14X^{13}Y^1 - 364X^{11}Y^3 + 2002X^9Y^5 - 3432X^7Y^7 + 2002X^5Y^9 - 364X^3Y^{11} + 14X^1Y^{13}]$$

$$Z_{14}^{-12} = \sqrt{30}[168X^{13}Y^1 - 2912X^{11}Y^3 + 8008X^9Y^5 - 8008X^5Y^9 + 2912X^3Y^{11} - 168X^1Y^{13} - 156X^{11}Y^1 + 2860X^9Y^3 - 10296X^7Y^5 + 10296X^5Y^7 - 2860X^3Y^9 + 156X^1Y^{11}]$$

$$Z_{14}^{-10} = \sqrt{30}[910X^{13}Y^1 - 9100X^{11}Y^3 + 2002X^9Y^5 + 24024X^7Y^7 + 2002X^5Y^9 - 9100X^3Y^{11} + 910X^1Y^{13} - 1560X^{11}Y^1 + 17160X^9Y^3 - 20592X^7Y^5 - 20592X^5Y^7 + 17160X^3Y^9 - 1560X^1Y^{11} + 660X^9Y^1 - 7920X^7Y^3 + 16632X^5Y^5 - 7920X^3Y^7 + 660X^1Y^9]$$

$$Z_{14}^{-8} = \sqrt{30}[2912X^{13}Y^1 - 11648X^{11}Y^3 - 32032X^9Y^5 + 32032X^5Y^9 + 11648X^3Y^{11} - 2912X^1Y^{13} - 6864X^{11}Y^1 + 34320X^9Y^3 + 41184X^7Y^5 - 41184X^5Y^7 - 34320X^3Y^9 + 6864X^1Y^{11} + 5280X^9Y^1 - 31680X^7Y^3 + 31680X^3Y^7 - 5280X^1Y^9 - 1320X^7Y^1 + 9240X^5Y^3 - 9240X^3Y^5 + 1320X^1Y^7]$$

$$Z_{14}^{-6} = \sqrt{30}[6006X^{13}Y^1 + 4004X^{11}Y^3 - 38038X^9Y^5 - 72072X^7Y^7 - 38038X^5Y^9 + 4004X^3Y^{11} + 6006X^1Y^{13} - 17160X^{11}Y^1 + 5720X^9Y^3 + 102960X^7Y^5 + 102960X^5Y^7 + 5720X^3Y^9 - 17160X^1Y^{11} + 17820X^9Y^1 - 23760X^7Y^3 - 83160X^5Y^5 - 23760X^3Y^7 + 17820X^1Y^9 - 7920X^7Y^1 + 18480X^5Y^3 + 18480X^3Y^5 - 7920X^1Y^7 + 1260X^5Y^1 - 4200X^3Y^3 + 1260X^1Y^5]$$

$$Z_{14}^{-4} = \sqrt{30}[8008X^{13}Y^1 + 32032X^{11}Y^3 + 40040X^9Y^5 - 40040X^5Y^9 - 32032X^3Y^{11} - 8008X^1Y^{13} - 25740X^{11}Y^1 - 77220X^9Y^3 - 51480X^7Y^5 + 51480X^5Y^7 + 77220X^3Y^9 + 25740X^1Y^{11} + 31680X^9Y^1 + 63360X^7Y^3 - 63360X^3Y^7 - 31680X^1Y^9 - 18480X^7Y^1 - 18480X^5Y^3 + 18480X^3Y^5 + 18480X^1Y^7 + 5040X^5Y^1 - 5040X^1Y^5 - 504X^3Y^1 + 504X^1Y^3]$$

$$Z_{14}^{-2} = \sqrt{30}[6006X^{13}Y^1 + 36036X^{11}Y^3 + 90090X^9Y^5 + 120120X^7Y^7 + 90090X^5Y^9 + 36036X^3Y^{11} + 6006X^1Y^{13} - 20592X^{11}Y^1 - 102960X^9Y^3 - 205920X^7Y^5 - 205920X^5Y^7 - 102960X^3Y^9 - 20592X^1Y^{11} + 27720X^9Y^1 + 110880X^7Y^3 + 166320X^5Y^5 + 110880X^3Y^7 + 27720X^1Y^9 - 18480X^7Y^1 - 55440X^5Y^3 - 55440X^3Y^5 - 18480X^1Y^7 + 6300X^5Y^1 + 12600X^3Y^3 + 6300X^1Y^5 - 1008X^3Y^1 - 1008X^1Y^3 + 56X^1Y^1]$$

$$Z_{14}^0 = \sqrt{15}[3432X^{14} + 24024X^{12}Y^2 + 72072X^{10}Y^4 + 120120X^8Y^6 + 120120X^6Y^8 + 72072X^4Y^{10} + 24024X^2Y^{12} + 3432Y^{14} - 12012X^{12} - 72072X^{10}Y^2 - 180180X^8Y^4 - 240240X^6Y^6 - 180180X^4Y^8 - 72072X^2Y^{10} - 12012Y^{12} + 16632X^{10} + 83160X^8Y^2 + 166320X^6Y^4 + 166320X^4Y^6 + 83160X^2Y^8 + 16632Y^{10} - 11550X^8 - 46200X^6Y^2 - 69300X^4Y^4 - 46200X^2Y^6 - 11550Y^8 + 4200X^6 + 12600X^4Y^2 + 12600X^2Y^4 + 4200Y^6 - 756X^4 - 1512X^2Y^2 - 756Y^4 + 56X^2 + 56Y^2 - 1]$$

$$\begin{aligned}
Z_{14}^2 &= \sqrt{30}[3003X^{14} + 15015X^{12}Y^2 + 27027X^{10}Y^4 + 15015X^8Y^6 - 15015X^6Y^8 - 27027X^4Y^{10} - 15015X^2Y^{12} - 3003Y^{14} - 10296X^{12} - 41184X^{10}Y^2 - 51480X^8Y^4 + 51480X^4Y^8 + 41184X^2Y^{10} + 10296Y^{12} + 13860X^{10} + 41580X^8Y^2 + 27720X^6Y^4 - 27720X^4Y^6 - 41580X^2Y^8 - 13860Y^{10} - 9240X^8 - 18480X^6Y^2 + 18480X^2Y^6 + 9240Y^8 + 3150X^6 + 3150X^4Y^2 - 3150X^2Y^4 - 3150Y^6 - 504X^4 + 504Y^4 + 28X^2 - 28Y^2] \\
Z_{14}^4 &= \sqrt{30}[2002X^{14} - 2002X^{12}Y^2 - 38038X^{10}Y^4 - 90090X^8Y^6 - 90090X^6Y^8 - 38038X^4Y^{10} - 2002X^2Y^{12} + 2002Y^{14} - 6435X^{12} + 12870X^{10}Y^2 + 109395X^8Y^4 + 180180X^6Y^6 + 109395X^4Y^8 + 12870X^2Y^{10} - 6435Y^{12} + 7920X^{10} - 23760X^8Y^2 - 110880X^6Y^4 - 110880X^4Y^6 - 23760X^2Y^8 + 7920Y^{10} - 4620X^8 + 18480X^6Y^2 + 46200X^4Y^4 + 18480X^2Y^6 - 4620Y^8 + 1260X^6 - 6300X^4Y^2 - 6300X^2Y^4 + 1260Y^6 - 126X^4 + 756X^2Y^2 - 126Y^4] \\
Z_{14}^6 &= \sqrt{30}[1001X^{14} - 11011X^{12}Y^2 - 39039X^{10}Y^4 - 27027X^8Y^6 + 27027X^6Y^8 + 39039X^4Y^{10} + 11011X^2Y^{12} - 1001Y^{14} - 2860X^{12} + 34320X^{10}Y^2 + 77220X^8Y^4 - 77220X^4Y^8 - 34320X^2Y^{10} + 2860Y^{12} + 2970X^{10} - 38610X^8Y^2 - 41580X^6Y^4 + 41580X^4Y^6 + 38610X^2Y^8 - 2970Y^{10} - 1320X^8 + 18480X^6Y^2 - 18480X^2Y^6 + 1320Y^8 + 210X^6 - 3150X^4Y^2 + 3150X^2Y^4 - 210Y^6] \\
Z_{14}^8 &= \sqrt{30}[364X^{14} - 9100X^{12}Y^2 - 4004X^{10}Y^4 + 36036X^8Y^6 + 36036X^6Y^8 - 4004X^4Y^{10} - 9100X^2Y^{12} + 364Y^{14} - 858X^{12} + 22308X^{10}Y^2 - 12870X^8Y^4 - 72072X^6Y^6 - 12870X^4Y^8 + 22308X^2Y^{10} - 858Y^{12} + 660X^{10} - 17820X^8Y^2 + 27720X^6Y^4 + 27720X^4Y^6 - 17820X^2Y^8 + 660Y^{10} - 165X^8 + 4620X^6Y^2 - 11550X^4Y^4 + 4620X^2Y^6 - 165Y^8] \\
Z_{14}^{10} &= \sqrt{30}[91X^{14} - 3913X^{12}Y^2 + 11011X^{10}Y^4 + 15015X^8Y^6 - 15015X^6Y^8 - 11011X^4Y^{10} + 3913X^2Y^{12} - 91Y^{14} - 156X^{12} + 6864X^{10}Y^2 - 25740X^8Y^4 + 25740X^4Y^8 - 6864X^2Y^{10} + 156Y^{12} + 66X^{10} - 2970X^8Y^2 + 13860X^6Y^4 - 13860X^4Y^6 + 2970X^2Y^8 - 66Y^{10}] \\
Z_{14}^{12} &= \sqrt{30}[14X^{14} - 910X^{12}Y^2 + 6006X^{10}Y^4 - 6006X^8Y^6 - 6006X^6Y^8 + 6006X^4Y^{10} - 910X^2Y^{12} + 14Y^{14} - 13X^{12} + 858X^{10}Y^2 - 6435X^8Y^4 + 12012X^6Y^6 - 6435X^4Y^8 + 858X^2Y^{10} - 13Y^{12}] \\
Z_{14}^{14} &= \sqrt{30}[X^{14} - 91X^{12}Y^2 + 1001X^{10}Y^4 - 3003X^8Y^6 + 3003X^6Y^8 - 1001X^4Y^{10} + 91X^2Y^{12} - Y^{14}] \\
Z_{15}^{-15} &= \sqrt{32}[15X^{14}Y^1 - 455X^{12}Y^3 + 3003X^{10}Y^5 - 6435X^8Y^7 + 5005X^6Y^9 - 1365X^4Y^{11} + 105X^2Y^{13} - Y^{15}] \\
Z_{15}^{-13} &= \sqrt{32}[195X^{14}Y^1 - 4095X^{12}Y^3 + 15015X^{10}Y^5 - 6435X^8Y^7 - 15015X^6Y^9 + 9555X^4Y^{11} - 1155X^2Y^{13} + 15Y^{15} - 182X^{12}Y^1 + 4004X^{10}Y^3 - 18018X^8Y^5 + 24024X^6Y^7 - 10010X^4Y^9 + 1092X^2Y^{11} - 14Y^{13}] \\
Z_{15}^{-11} &= \sqrt{32}[1155X^{14}Y^1 - 15015X^{12}Y^3 + 15015X^{10}Y^5 + 45045X^8Y^7 - 15015X^6Y^9 - 23205X^4Y^{11} + 5565X^2Y^{13} - 105Y^{15} - 2002X^{12}Y^1 + 28028X^{10}Y^3 - 54054X^8Y^5 - 24024X^6Y^7 + 50050X^4Y^9 - 9828X^2Y^{11} + 182Y^{13} + 858X^{10}Y^1 - 12870X^8Y^3 + 36036X^6Y^5 - 25740X^4Y^7 + 4290X^2Y^9 - 78Y^{11}] \\
Z_{15}^{-9} &= \sqrt{32}[4095X^{14}Y^1 - 25935X^{12}Y^3 - 45045X^{10}Y^5 + 45045X^8Y^7 + 85085X^6Y^9 + 9555X^4Y^{11} - 15015X^2Y^{13} + 455Y^{15} - 9828X^{12}Y^1 + 72072X^{10}Y^3 + 36036X^8Y^5 - 144144X^6Y^7 - 60060X^4Y^9 + 37128X^2Y^{11} - 1092Y^{13} + 7722X^{10}Y^1 - 64350X^8Y^3 + 36036X^6Y^5 + 77220X^4Y^7 - 30030X^2Y^9 + 858Y^{11} - 1980X^8Y^1 + 18480X^6Y^3 - 27720X^4Y^5 + 7920X^2Y^7 - 220Y^9] \\
Z_{15}^{-7} &= \sqrt{32}[9555X^{14}Y^1 - 9555X^{12}Y^3 - 105105X^{10}Y^5 - 135135X^8Y^7 - 15015X^6Y^9 + 58695X^4Y^{11} + 23205X^2Y^{13} - 1365Y^{15} - 28028X^{12}Y^1 + 56056X^{10}Y^3 + 252252X^8Y^5 + 144144X^6Y^7 - 100100X^4Y^9 - 72072X^2Y^{11} + 4004Y^{13} + 30030X^{10}Y^1 - 90090X^8Y^3 - 180180X^6Y^5 + 25740X^4Y^7 + 81510X^2Y^9 - 4290Y^{11} - 13860X^8Y^1 + 55440X^6Y^3 + 27720X^4Y^5 - 39600X^2Y^7 + 1980Y^9 + 2310X^6Y^1 - 11550X^4Y^3 + 6930X^2Y^5 - 330Y^7] \\
Z_{15}^{-5} &= \sqrt{32}[15015X^{14}Y^1 + 45045X^{12}Y^3 + 3003X^{10}Y^5 - 135135X^8Y^7 - 195195X^6Y^9 - 105105X^4Y^{11} - 15015X^2Y^{13} + 3003Y^{15} - 50050X^{12}Y^1 - 100100X^{10}Y^3 + 90090X^8Y^5 + 360360X^6Y^7 + 290290X^4Y^9 + 60060X^2Y^{11} - 10010Y^{13} + 64350X^{10}Y^1 + 64350X^8Y^3 - 180180X^6Y^5 - 283140X^4Y^7 - 90090X^2Y^9 + 12870Y^{11} - 39600X^8Y^1 + 110880X^4Y^5 + 63360X^2Y^7 - 7920Y^9 + 11550X^6Y^1 - 11550X^4Y^3 - 20790X^2Y^5 + 2310Y^7 - 1260X^4Y^1 + 2520X^2Y^3 - 252Y^5] \\
Z_{15}^{-3} &= \sqrt{32}[15015X^{14}Y^1 + 85085X^{12}Y^3 + 195195X^{10}Y^5 + 225225X^8Y^7 + 125125X^6Y^9 + 15015X^4Y^{11} - 15015X^2Y^{13} - 5005Y^{15} - 54054X^{12}Y^1 - 252252X^{10}Y^3 - 450450X^8Y^5 - 360360X^6Y^7 - 90090X^4Y^9 + 36036X^2Y^{11} + 18018Y^{13} + 77220X^{10}Y^1 + 283140X^8Y^3 + 360360X^6Y^5 + 154440X^4Y^7 - 25740X^2Y^9 - 25740Y^{11} - 55440X^8Y^1 - 147840X^6Y^3 - 110880X^4Y^5 + 18480Y^9 + 20790X^6Y^1 + 34650X^4Y^3 + 6930X^2Y^5 - 6930Y^7 - 3780X^4Y^1 - 2520X^2Y^3 + 1260Y^5 + 252X^2Y^1 - 84Y^3] \\
Z_{15}^{-1} &= \sqrt{32}[6435X^{14}Y^1 + 45045X^{12}Y^3 + 135135X^{10}Y^5 + 225225X^8Y^7 + 225225X^6Y^9 + 135135X^4Y^{11} + 45045X^2Y^{13} + 6435Y^{15} - 24024X^{12}Y^1 - 144144X^{10}Y^3 - 360360X^8Y^5 - 480480X^6Y^7 - 360360X^4Y^9 - 144144X^2Y^{11} - 24024Y^{13} + 36036X^{10}Y^1 + 180180X^8Y^3 + 360360X^6Y^5 + 360360X^4Y^7 + 180180X^2Y^9 + 36036Y^{11} - 27720X^8Y^1 - 110880X^6Y^3 - 166320X^4Y^5 - 110880X^2Y^7 - 27720Y^9 + 11550X^6Y^1 + 34650X^4Y^3 + 34650X^2Y^5 + 11550Y^7 - 2520X^4Y^1 - 5040X^2Y^3 - 2520Y^5 + 252X^2Y^1 + 252Y^3 - 8Y^1] \\
Z_{15}^1 &= \sqrt{32}[6435X^{15} + 45045X^{13}Y^2 + 135135X^{11}Y^4 + 225225X^9Y^6 + 225225X^7Y^8 + 135135X^5Y^{10} + 45045X^3Y^{12} + 6435X^1Y^{14} - 24024X^{13} - 144144X^{11}Y^2 - 360360X^9Y^4 - 480480X^7Y^6 - 360360X^5Y^8 - 144144X^3Y^{10} - 24024X^1Y^{12} + 36036X^{11} + 180180X^9Y^2 + 360360X^7Y^4 + 360360X^5Y^6 + 180180X^3Y^8 + 36036X^1Y^{10} - 27720X^9 - 110880X^7Y^2 - 166320X^5Y^4 - 110880X^3Y^6 - 27720X^1Y^8 + 11550X^7 + 34650X^5Y^2 + 34650X^3Y^4 + 11550X^1Y^6 - 2520X^5 - 5040X^3Y^2 - 2520X^1Y^4 + 252X^3 + 252X^1Y^2 - 8X^1] \\
Z_{15}^3 &= \sqrt{32}[5005X^{15} + 15015X^{13}Y^2 - 15015X^{11}Y^4 - 125125X^9Y^6 - 225225X^7Y^8 - 195195X^5Y^{10} - 85085X^3Y^{12} - 15015X^1Y^{14} - 18018X^{13} - 36036X^{11}Y^2 + 90090X^9Y^4 + 360360X^7Y^6 + 450450X^5Y^8 + 252252X^3Y^{10} + 54054X^1Y^{12} + 25740X^{11} + 25740X^9Y^2 - 154440X^7Y^4 - 360360X^5Y^6 - 283140X^3Y^8 - 77220X^1Y^{10} - 18480X^9 + 110880X^5Y^4 + 147840X^3Y^6 + 55440X^1Y^8 + 6930X^7 - 6930X^5Y^2 - 34650X^3Y^4 - 20790X^1Y^6 - 1260X^5 + 2520X^3Y^2 + 3780X^1Y^4 + 84X^3 - 252X^1Y^2] \\
Z_{15}^5 &= \sqrt{32}[3003X^{15} - 15015X^{13}Y^2 - 105105X^{11}Y^4 - 195195X^9Y^6 - 135135X^7Y^8 + 3003X^5Y^{10} + 45045X^3Y^{12} + 15015X^1Y^{14} - 10010X^{13} + 60060X^{11}Y^2 + 290290X^9Y^4 + 360360X^7Y^6 + 90090X^5Y^8 - 100100X^3Y^{10} - 50050X^1Y^{12} + 12870X^{11} - 90090X^9Y^2 - 283140X^7Y^4 - 180180X^5Y^6 + 64350X^3Y^8 + 64350X^1Y^{10} - 7920X^9 + 63360X^7Y^2 +
\end{aligned}$$

$$110880X^5Y^4 - 39600X^1Y^8 + 2310X^7 - 20790X^5Y^2 - 11550X^3Y^4 + 11550X^1Y^6 - 252X^5 + 2520X^3Y^2 - 1260X^1Y^4]$$

$$Z_{15}^7 = \sqrt{32}[1365X^{15} - 23205X^{13}Y^2 - 58695X^{11}Y^4 + 15015X^9Y^6 + 135135X^7Y^8 + 105105X^5Y^{10} + 9555X^3Y^{12} - 9555X^1Y^{14} - 4004X^{13} + 72072X^{11}Y^2 + 100100X^9Y^4 - 144144X^7Y^6 - 252252X^5Y^8 - 56056X^3Y^{10} + 28028X^1Y^{12} + 4290X^{11} - 81510X^9Y^2 - 25740X^7Y^4 + 180180X^5Y^6 + 90090X^3Y^8 - 30030X^1Y^{10} - 1980X^9 + 39600X^7Y^2 - 27720X^5Y^4 - 55440X^3Y^6 + 13860X^1Y^8 + 330X^7 - 6930X^5Y^2 + 11550X^3Y^4 - 2310X^1Y^6]$$

$$Z_{15}^9 = \sqrt{32}[455X^{15} - 15015X^{13}Y^2 + 9555X^{11}Y^4 + 85085X^9Y^6 + 45045X^7Y^8 - 45045X^5Y^{10} - 25935X^3Y^{12} + 4095X^1Y^{14} - 1092X^{13} + 37128X^{11}Y^2 - 60060X^9Y^4 - 144144X^7Y^6 + 36036X^5Y^8 + 72072X^3Y^{10} - 9828X^1Y^{12} + 858X^{11} - 30030X^9Y^2 + 77220X^7Y^4 + 36036X^5Y^6 - 64350X^3Y^8 + 7722X^1Y^{10} - 220X^9 + 7920X^7Y^2 - 27720X^5Y^4 + 18480X^3Y^6 - 1980X^1Y^8]$$

$$Z_{15}^{11} = \sqrt{32}[105X^{15} - 5565X^{13}Y^2 + 23205X^{11}Y^4 + 15015X^9Y^6 - 45045X^7Y^8 - 15015X^5Y^{10} + 15015X^3Y^{12} - 1155X^1Y^{14} - 182X^{13} + 9828X^{11}Y^2 - 50050X^9Y^4 + 24024X^7Y^6 + 54054X^5Y^8 - 28028X^3Y^{10} + 2002X^1Y^{12} + 78X^{11} - 4290X^9Y^2 + 25740X^7Y^4 - 36036X^5Y^6 + 12870X^3Y^8 - 858X^1Y^{10}]$$

$$Z_{15}^{13} = \sqrt{32}[15X^{15} - 1155X^{13}Y^2 + 9555X^{11}Y^4 - 15015X^9Y^6 - 6435X^7Y^8 + 15015X^5Y^{10} - 4095X^3Y^{12} + 195X^1Y^{14} - 14X^{13} + 1092X^{11}Y^2 - 10010X^9Y^4 + 24024X^7Y^6 - 18018X^5Y^8 + 4004X^3Y^{10} - 182X^1Y^{12}]$$

$$Z_{15}^{15} = \sqrt{32}[X^{15} - 105X^{13}Y^2 + 1365X^{11}Y^4 - 5005X^9Y^6 + 6435X^7Y^8 - 3003X^5Y^{10} + 455X^3Y^{12} - 15X^1Y^{14}]$$

2 X slope ($\frac{\delta Z}{\delta X}$)

$$\frac{\delta Z_0^0}{\delta x} = 1$$

$$\frac{\delta Z_1^{-1}}{\delta x} = 2$$

$$\frac{\delta Z_1^1}{\delta x} = 2[1]$$

$$\frac{\delta Z_2^{-2}}{\delta x} = \sqrt{6}[2Y^1]$$

$$\frac{\delta Z_2^0}{\delta x} = \sqrt{3}[4X^1]$$

$$\frac{\delta Z_2^2}{\delta x} = \sqrt{6}[2X^1]$$

$$\frac{\delta Z_3^{-3}}{\delta x} = \sqrt{8}[6X^1Y^1]$$

$$\frac{\delta Z_3^{-1}}{\delta x} = \sqrt{8}[6X^1Y^1]$$

$$\frac{\delta Z_3^1}{\delta x} = \sqrt{8}[9X^2 + 3Y^2 - 2]$$

$$\frac{\delta Z_3^3}{\delta x} = \sqrt{8}[3X^2 - 3Y^2]$$

$$\frac{\delta Z_4^{-4}}{\delta x} = \sqrt{10}[12X^2Y^1 - 4Y^3]$$

$$\frac{\delta Z_4^{-2}}{\delta x} = \sqrt{10}[24X^2Y^1 + 8Y^3 - 6Y^1]$$

$$\frac{\delta Z_4^0}{\delta x} = \sqrt{5}[24X^3 + 24X^1Y^2 - 12X^1]$$

$$\frac{\delta Z_4^2}{\delta x} = \sqrt{10}[16X^3 - 6X^1]$$

$$\frac{\delta Z_4^4}{\delta x} = \sqrt{10}[4X^3 - 12X^1Y^2]$$

$$\frac{\delta Z_5^{-5}}{\delta x} = \sqrt{12}[20X^3Y^1 - 20X^1Y^3]$$

$$\frac{\delta Z_5^{-3}}{\delta x} = \sqrt{12}[60X^3Y^1 + 20X^1Y^3 - 24X^1Y^1]$$

$$\frac{\delta Z_5^{-1}}{\delta x} = \sqrt{12}[40X^3Y^1 + 40X^1Y^3 - 24X^1Y^1]$$

$$\frac{\delta Z_5^1}{\delta x} = \sqrt{12}[50X^4 + 60X^2Y^2 + 10Y^4 - 36X^2 - 12Y^2 + 3]$$

$$\frac{\delta Z_5^3}{\delta x} = \sqrt{12}[25X^4 - 30X^2Y^2 - 15Y^4 - 12X^2 + 12Y^2]$$

$$\frac{\delta Z_5^5}{\delta x} = \sqrt{12}[5X^4 - 30X^2Y^2 + 5Y^4]$$

$$\frac{\delta Z_6^{-6}}{\delta x} = \sqrt{14}[30X^4Y^1 - 60X^2Y^3 + 6Y^5]$$

$$\frac{\delta Z_6^{-4}}{\delta x} = \sqrt{14}[120X^4Y^1 - 24Y^5 - 60X^2Y^1 + 20Y^3]$$

$$\frac{\delta Z_6^{-2}}{\delta x} = \sqrt{14}[150X^4Y^1 + 180X^2Y^3 + 30Y^5 - 120X^2Y^1 - 40Y^3 + 12Y^1]$$

$$\frac{\delta Z_6^0}{\delta x} = \sqrt{7}[120X^5 + 240X^3Y^2 + 120X^1Y^4 - 120X^3 - 120X^1Y^2 + 24X^1]$$

$$\frac{\delta Z_6^2}{\delta x} = \sqrt{14}[90X^5 + 60X^3Y^2 - 30X^1Y^4 - 80X^3 + 12X^1]$$

$$\frac{\delta Z_6^4}{\delta x} = \sqrt{14}[36X^5 - 120X^3Y^2 - 60X^1Y^4 - 20X^3 + 60X^1Y^2]$$

$$\frac{\delta Z_6^6}{\delta x} = \sqrt{14}[6X^5 - 60X^3Y^2 + 30X^1Y^4]$$

$$\begin{aligned}
\frac{\delta Z_7^{-7}}{\delta x} &= 4[42X^5Y^1 - 140X^3Y^3 + 42X^1Y^5] \\
\frac{\delta Z_7^{-5}}{\delta x} &= 4[210X^5Y^1 - 140X^3Y^3 - 126X^1Y^5 - 120X^3Y^1 + 120X^1Y^3] \\
\frac{\delta Z_7^{-3}}{\delta x} &= 4[378X^5Y^1 + 420X^3Y^3 + 42X^1Y^5 - 360X^3Y^1 - 120X^1Y^3 + 60X^1Y^1] \\
\frac{\delta Z_7^{-1}}{\delta x} &= 4[210X^5Y^1 + 420X^3Y^3 + 210X^1Y^5 - 240X^3Y^1 - 240X^1Y^3 + 60X^1Y^1] \\
\frac{\delta Z_7^1}{\delta x} &= 4[245X^6 + 525X^4Y^2 + 315X^2Y^4 + 35Y^6 - 300X^4 - 360X^2Y^2 - 60Y^4 + 90X^2 + 30Y^2 - 4] \\
\frac{\delta Z_7^3}{\delta x} &= 4[147X^6 - 105X^4Y^2 - 315X^2Y^4 - 63Y^6 - 150X^4 + 180X^2Y^2 + 90Y^4 + 30X^2 - 30Y^2] \\
\frac{\delta Z_7^5}{\delta x} &= 4[49X^6 - 315X^4Y^2 - 105X^2Y^4 + 35Y^6 - 30X^4 + 180X^2Y^2 - 30Y^4] \\
\frac{\delta Z_7^7}{\delta x} &= 4[7X^6 - 105X^4Y^2 + 105X^2Y^4 - 7Y^6] \\
\frac{\delta Z_8^{-8}}{\delta x} &= \sqrt{18}[56X^6Y^1 - 280X^4Y^3 + 168X^2Y^5 - 8Y^7] \\
\frac{\delta Z_8^{-6}}{\delta x} &= \sqrt{18}[336X^6Y^1 - 560X^4Y^3 - 336X^2Y^5 + 48Y^7 - 210X^4Y^1 + 420X^2Y^3 - 42Y^5] \\
\frac{\delta Z_8^{-4}}{\delta x} &= \sqrt{18}[784X^6Y^1 + 560X^4Y^3 - 336X^2Y^5 - 112Y^7 - 840X^4Y^1 + 168Y^5 + 180X^2Y^1 - 60Y^3] \\
\frac{\delta Z_8^{-2}}{\delta x} &= \sqrt{18}[784X^6Y^1 + 1680X^4Y^3 + 1008X^2Y^5 + 112Y^7 - 1050X^4Y^1 - 1260X^2Y^3 - 210Y^5 + 360X^2Y^1 + 120Y^3 - 20Y^1] \\
\frac{\delta Z_8^0}{\delta x} &= 3[560X^7 + 1680X^5Y^2 + 1680X^3Y^4 + 560X^1Y^6 - 840X^5 - 1680X^3Y^2 - 840X^1Y^4 + 360X^3 + 360X^1Y^2 - 40X^1] \\
\frac{\delta Z_8^2}{\delta x} &= \sqrt{18}[448X^7 + 672X^5Y^2 - 224X^1Y^6 - 630X^5 - 420X^3Y^2 + 210X^1Y^4 + 240X^3 - 20X^1] \\
\frac{\delta Z_8^4}{\delta x} &= \sqrt{18}[224X^7 - 672X^5Y^2 - 1120X^3Y^4 - 224X^1Y^6 - 252X^5 + 840X^3Y^2 + 420X^1Y^4 + 60X^3 - 180X^1Y^2] \\
\frac{\delta Z_8^6}{\delta x} &= \sqrt{18}[64X^7 - 672X^5Y^2 + 224X^1Y^6 - 42X^5 + 420X^3Y^2 - 210X^1Y^4] \\
\frac{\delta Z_8^8}{\delta x} &= \sqrt{18}[8X^7 - 168X^5Y^2 + 280X^3Y^4 - 56X^1Y^6] \\
\frac{\delta Z_9^{-9}}{\delta x} &= \sqrt{20}[72X^7Y^1 - 504X^5Y^3 + 504X^3Y^5 - 72X^1Y^7] \\
\frac{\delta Z_9^{-7}}{\delta x} &= \sqrt{20}[504X^7Y^1 - 1512X^5Y^3 - 504X^3Y^5 + 360X^1Y^7 - 336X^5Y^1 + 1120X^3Y^3 - 336X^1Y^5] \\
\frac{\delta Z_9^{-5}}{\delta x} &= \sqrt{20}[1440X^7Y^1 - 2016X^3Y^5 - 576X^1Y^7 - 1680X^5Y^1 + 1120X^3Y^3 + 1008X^1Y^5 + 420X^3Y^1 - 420X^1Y^3] \\
\frac{\delta Z_9^{-3}}{\delta x} &= \sqrt{20}[2016X^7Y^1 + 4032X^5Y^3 + 2016X^3Y^5 - 3024X^5Y^1 - 3360X^3Y^3 - 336X^1Y^5 + 1260X^3Y^1 + 420X^1Y^3 - 120X^1Y^1] \\
\frac{\delta Z_9^{-1}}{\delta x} &= \sqrt{20}[1008X^7Y^1 + 3024X^5Y^3 + 3024X^3Y^5 + 1008X^1Y^7 - 1680X^5Y^1 - 3360X^3Y^3 - 1680X^1Y^5 + 840X^3Y^1 + 840X^1Y^3 - 120X^1Y^1] \\
\frac{\delta Z_9^1}{\delta x} &= \sqrt{20}[1134X^8 + 3528X^6Y^2 + 3780X^4Y^4 + 1512X^2Y^6 + 126Y^8 - 1960X^6 - 4200X^4Y^2 - 2520X^2Y^4 - 280Y^6 + 1050X^4 + 1260X^2Y^2 + 210Y^4 - 180X^2 - 60Y^2 + 5] \\
\frac{\delta Z_9^3}{\delta x} &= \sqrt{20}[756X^8 - 2520X^4Y^4 - 2016X^2Y^6 - 252Y^8 - 1176X^6 + 840X^4Y^2 + 2520X^2Y^4 + 504Y^6 + 525X^4 - 630X^2Y^2 - 315Y^4 - 60X^2 + 60Y^2] \\
\frac{\delta Z_9^5}{\delta x} &= \sqrt{20}[324X^8 - 2016X^6Y^2 - 2520X^4Y^4 + 180Y^8 - 392X^6 + 2520X^4Y^2 + 840X^2Y^4 - 280Y^6 + 105X^4 - 630X^2Y^2 + 105Y^4] \\
\frac{\delta Z_9^7}{\delta x} &= \sqrt{20}[81X^8 - 1260X^6Y^2 + 630X^4Y^4 + 756X^2Y^6 - 63Y^8 - 56X^6 + 840X^4Y^2 - 840X^2Y^4 + 56Y^6] \\
\frac{\delta Z_9^9}{\delta x} &= \sqrt{20}[9X^8 - 252X^6Y^2 + 630X^4Y^4 - 252X^2Y^6 + 9Y^8] \\
\frac{\delta Z_{10}^{-10}}{\delta x} &= \sqrt{22}[90X^8Y^1 - 840X^6Y^3 + 1260X^4Y^5 - 360X^2Y^7 + 10Y^9] \\
\frac{\delta Z_{10}^{-8}}{\delta x} &= \sqrt{22}[720X^8Y^1 - 3360X^6Y^3 + 1440X^2Y^7 - 80Y^9 - 504X^6Y^1 + 2520X^4Y^3 - 1512X^2Y^5 + 72Y^7]
\end{aligned}$$

$$\begin{aligned}
\frac{\delta Z_{10}^{-6}}{\delta x} &= \sqrt{22}[2430X^8Y^1 - 2520X^6Y^3 - 6300X^4Y^5 - 1080X^2Y^7 + 270Y^9 - 3024X^6Y^1 + 5040X^4Y^3 + 3024X^2Y^5 - 432Y^7 + 840X^4Y^1 - 1680X^2Y^3 + 168Y^5] \\
\frac{\delta Z_{10}^{-4}}{\delta x} &= \sqrt{22}[4320X^8Y^1 + 6720X^6Y^3 - 2880X^2Y^7 - 480Y^9 - 7056X^6Y^1 - 5040X^4Y^3 + 3024X^2Y^5 + 1008Y^7 + 3360X^4Y^1 - 672Y^5 - 420X^2Y^1 + 140Y^3] \\
\frac{\delta Z_{10}^{-2}}{\delta x} &= \sqrt{22}[3780X^8Y^1 + 11760X^6Y^3 + 12600X^4Y^5 + 5040X^2Y^7 + 420Y^9 - 7056X^6Y^1 - 15120X^4Y^3 - 9072X^2Y^5 - 1008Y^7 + 4200X^4Y^1 + 5040X^2Y^3 + 840Y^5 - 840X^2Y^1 - 280Y^3 + 30Y^1] \\
\frac{\delta Z_{10}^0}{\delta x} &= \sqrt{11}[2520X^9 + 10080X^7Y^2 + 15120X^5Y^4 + 10080X^3Y^6 + 2520X^1Y^8 - 5040X^7 - 15120X^5Y^2 - 15120X^3Y^4 - 5040X^1Y^6 + 3360X^5 + 6720X^3Y^2 + 3360X^1Y^4 - 840X^3 - 840X^1Y^2 + 60X^1] \\
\frac{\delta Z_{10}^2}{\delta x} &= \sqrt{22}[2100X^9 + 5040X^7Y^2 + 2520X^5Y^4 - 1680X^3Y^6 - 1260X^1Y^8 - 4032X^7 - 6048X^5Y^2 + 2016X^1Y^6 + 2520X^5 + 1680X^3Y^2 - 840X^1Y^4 - 560X^3 + 30X^1] \\
\frac{\delta Z_{10}^4}{\delta x} &= \sqrt{22}[1200X^9 - 2880X^7Y^2 - 10080X^5Y^4 - 6720X^3Y^6 - 720X^1Y^8 - 2016X^7 + 6048X^5Y^2 + 10080X^3Y^4 + 2016X^1Y^6 + 1008X^5 - 3360X^3Y^2 - 1680X^1Y^4 - 140X^3 + 420X^1Y^2] \\
\frac{\delta Z_{10}^6}{\delta x} &= \sqrt{22}[450X^9 - 4680X^7Y^2 - 3780X^5Y^4 + 2520X^3Y^6 + 1170X^1Y^8 - 576X^7 + 6048X^5Y^2 - 2016X^1Y^6 + 168X^5 - 1680X^3Y^2 + 840X^1Y^4] \\
\frac{\delta Z_{10}^8}{\delta x} &= \sqrt{22}[100X^9 - 2160X^7Y^2 + 2520X^5Y^4 + 1680X^3Y^6 - 540X^1Y^8 - 72X^7 + 1512X^5Y^2 - 2520X^3Y^4 + 504X^1Y^6] \\
\frac{\delta Z_{10}^{10}}{\delta x} &= \sqrt{22}[10X^9 - 360X^7Y^2 + 1260X^5Y^4 - 840X^3Y^6 + 90X^1Y^8] \\
\frac{\delta Z_{11}^{-11}}{\delta x} &= \sqrt{24}[110X^9Y^1 - 1320X^7Y^3 + 2772X^5Y^5 - 1320X^3Y^7 + 110X^1Y^9] \\
\frac{\delta Z_{11}^{-9}}{\delta x} &= \sqrt{24}[990X^9Y^1 - 6600X^7Y^3 + 2772X^5Y^5 + 3960X^3Y^7 - 770X^1Y^9 - 720X^7Y^1 + 5040X^5Y^3 - 5040X^3Y^5 + 720X^1Y^7] \\
\frac{\delta Z_{11}^{-7}}{\delta x} &= \sqrt{24}[3850X^9Y^1 - 9240X^7Y^3 - 13860X^5Y^5 + 1320X^3Y^7 + 2090X^1Y^9 - 5040X^7Y^1 + 15120X^5Y^3 + 5040X^3Y^5 - 3600X^1Y^7 + 1512X^5Y^1 - 5040X^3Y^3 + 1512X^1Y^5] \\
\frac{\delta Z_{11}^{-5}}{\delta x} &= \sqrt{24}[8250X^9Y^1 + 6600X^7Y^3 - 13860X^5Y^5 - 14520X^3Y^7 - 2310X^1Y^9 - 14400X^7Y^1 + 20160X^5Y^3 + 5760X^1Y^7 + 7560X^5Y^1 - 5040X^3Y^3 - 4536X^1Y^5 - 1120X^3Y^1 + 1120X^1Y^3] \\
\frac{\delta Z_{11}^{-3}}{\delta x} &= \sqrt{24}[9900X^9Y^1 + 29040X^7Y^3 + 27720X^5Y^5 + 7920X^3Y^7 - 660X^1Y^9 - 20160X^7Y^1 - 40320X^5Y^3 - 20160X^3Y^5 + 13608X^5Y^1 + 15120X^3Y^3 + 1512X^1Y^5 - 3360X^3Y^1 - 1120X^1Y^3 + 210X^1Y^1] \\
\frac{\delta Z_{11}^{-1}}{\delta x} &= \sqrt{24}[4620X^9Y^1 + 18480X^7Y^3 + 27720X^5Y^5 + 18480X^3Y^7 + 4620X^1Y^9 - 10080X^7Y^1 - 30240X^5Y^3 - 30240X^3Y^5 - 10080X^1Y^7 + 7560X^5Y^1 + 15120X^3Y^3 + 7560X^1Y^5 - 2240X^3Y^1 - 2240X^1Y^3 + 210X^1Y^1] \\
\frac{\delta Z_{11}^1}{\delta x} &= \sqrt{24}[5082X^{10} + 20790X^8Y^2 + 32340X^6Y^4 + 23100X^4Y^6 + 6930X^2Y^8 + 462Y^{10} - 11340X^8 - 35280X^6Y^2 - 37800X^4Y^4 - 15120X^2Y^6 - 1260Y^8 + 8820X^6 + 18900X^4Y^2 + 11340X^2Y^4 + 1260Y^6 - 2800X^4 - 3360X^2Y^2 - 560Y^4 + 315X^2 + 105Y^2 - 6] \\
\frac{\delta Z_{11}^3}{\delta x} &= \sqrt{24}[3630X^{10} + 2970X^8Y^2 - 13860X^6Y^4 - 23100X^4Y^6 - 10890X^2Y^8 - 990Y^{10} - 7560X^8 + 25200X^4Y^4 + 20160X^2Y^6 + 2520Y^8 + 5292X^6 - 3780X^4Y^2 - 11340X^2Y^4 - 2268Y^6 - 1400X^4 + 1680X^2Y^2 + 840Y^4 + 105X^2 - 105Y^2] \\
\frac{\delta Z_{11}^5}{\delta x} &= \sqrt{24}[1815X^{10} - 10395X^8Y^2 - 25410X^6Y^4 - 11550X^4Y^6 + 2475X^2Y^8 + 825Y^{10} - 3240X^8 + 20160X^6Y^2 + 25200X^4Y^4 - 1800Y^8 + 1764X^6 - 11340X^4Y^2 - 3780X^2Y^4 + 1260Y^6 - 280X^4 + 1680X^2Y^2 - 280Y^4] \\
\frac{\delta Z_{11}^7}{\delta x} &= \sqrt{24}[605X^{10} - 9405X^8Y^2 - 2310X^6Y^4 + 11550X^4Y^6 + 3465X^2Y^8 - 385Y^{10} - 810X^8 + 12600X^6Y^2 - 6300X^4Y^4 - 7560X^2Y^6 + 630Y^8 + 252X^6 - 3780X^4Y^2 + 3780X^2Y^4 - 252Y^6] \\
\frac{\delta Z_{11}^9}{\delta x} &= \sqrt{24}[121X^{10} - 3465X^8Y^2 + 6930X^6Y^4 + 2310X^4Y^6 - 2475X^2Y^8 + 99Y^{10} - 90X^8 + 2520X^6Y^2 - 6300X^4Y^4 + 2520X^2Y^6 - 90Y^8] \\
\frac{\delta Z_{11}^{11}}{\delta x} &= \sqrt{24}[11X^{10} - 495X^8Y^2 + 2310X^6Y^4 - 2310X^4Y^6 + 495X^2Y^8 - 11Y^{10}] \\
\frac{\delta Z_{12}^{-12}}{\delta x} &= \sqrt{26}[132X^{10}Y^1 - 1980X^8Y^3 + 5544X^6Y^5 - 3960X^4Y^7 + 660X^2Y^9 - 12Y^{11}] \\
\frac{\delta Z_{12}^{-10}}{\delta x} &= \sqrt{26}[1320X^{10}Y^1 - 11880X^8Y^3 + 11088X^6Y^5 + 7920X^4Y^7 - 3960X^2Y^9 + 120Y^{11} - 990X^8Y^1 + 9240X^6Y^3 - 13860X^4Y^5 + 3960X^2Y^7 - 110Y^9] \\
\frac{\delta Z_{12}^{-8}}{\delta x} &= \sqrt{26}[5808X^{10}Y^1 - 23760X^8Y^3 - 22176X^6Y^5 + 15840X^4Y^7 + 7920X^2Y^9 - 528Y^{11} - 7920X^8Y^1 + 36960X^6Y^3 - 15840X^4Y^5 + 880Y^9 + 2520X^6Y^1 - 12600X^4Y^3 + 7560X^2Y^5 - 360Y^7]
\end{aligned}$$

$$\frac{\delta Z_{12}^{-6}}{\delta x} = \sqrt{26}[14520X^{10}Y^1 - 3960X^8Y^3 - 55440X^6Y^5 - 39600X^4Y^7 - 1320X^2Y^9 + 1320Y^{11} - 26730X^8Y^1 + 27720X^6Y^3 + 69300X^4Y^5 + 11880X^2Y^7 - 2970Y^9 + 15120X^6Y^1 - 25200X^4Y^3 - 15120X^2Y^5 + 2160Y^7 - 2520X^4Y^1 + 5040X^2Y^3 - 504Y^5]$$

$$\frac{\delta Z_{12}^{-4}}{\delta x} = \sqrt{26}[21780X^{10}Y^1 + 53460X^8Y^3 + 27720X^6Y^5 - 19800X^4Y^7 - 17820X^2Y^9 - 1980Y^{11} - 47520X^8Y^1 - 73920X^6Y^3 + 31680X^2Y^7 + 5280Y^9 + 35280X^6Y^1 + 25200X^4Y^3 - 15120X^2Y^5 - 5040Y^7 - 10080X^4Y^1 + 2016Y^5 + 840X^2Y^1 - 280Y^3]$$

$$\frac{\delta Z_{12}^{-2}}{\delta x} = \sqrt{26}[17424X^{10}Y^1 + 71280X^8Y^3 + 110880X^6Y^5 + 79200X^4Y^7 + 23760X^2Y^9 + 1584Y^{11} - 41580X^8Y^1 - 129360X^6Y^3 - 138600X^4Y^5 - 55440X^2Y^7 - 4620Y^9 + 35280X^6Y^1 + 75600X^4Y^3 + 45360X^2Y^5 + 5040Y^7 - 12600X^4Y^1 - 15120X^2Y^3 - 2520Y^5 + 1680X^2Y^1 + 560Y^3 - 42Y^1]$$

$$\frac{\delta Z_{12}^0}{\delta x} = \sqrt{13}[11088X^{11} + 55440X^9Y^2 + 110880X^7Y^4 + 110880X^5Y^6 + 55440X^3Y^8 + 11088X^1Y^{10} - 27720X^9 - 110880X^7Y^2 - 166320X^5Y^4 - 110880X^3Y^6 - 27720X^1Y^8 + 25200X^7 + 75600X^5Y^2 + 75600X^3Y^4 + 25200X^1Y^6 - 10080X^5 - 20160X^3Y^2 - 10080X^1Y^4 + 1680X^3 + 1680X^1Y^2 - 84X^1]$$

$$\frac{\delta Z_{12}^2}{\delta x} = \sqrt{26}[9504X^{11} + 31680X^9Y^2 + 31680X^7Y^4 - 15840X^3Y^8 - 6336X^1Y^{10} - 23100X^9 - 55440X^7Y^2 - 27720X^5Y^4 + 18480X^3Y^6 + 13860X^1Y^8 + 20160X^7 + 30240X^5Y^2 - 10080X^1Y^6 - 7560X^5 - 5040X^3Y^2 + 2520X^1Y^4 + 1120X^3 - 42X^1]$$

$$\frac{\delta Z_{12}^4}{\delta x} = \sqrt{26}[5940X^{11} - 9900X^9Y^2 - 67320X^7Y^4 - 83160X^5Y^6 - 33660X^3Y^8 - 1980X^1Y^{10} - 13200X^9 + 31680X^7Y^2 + 110880X^5Y^4 + 73920X^3Y^6 + 7920X^1Y^8 + 10080X^7 - 30240X^5Y^2 - 50400X^3Y^4 - 10080X^1Y^6 - 3024X^5 + 10080X^3Y^2 + 5040X^1Y^4 + 280X^3 - 840X^1Y^2]$$

$$\frac{\delta Z_{12}^6}{\delta x} = \sqrt{26}[2640X^{11} - 26400X^9Y^2 - 47520X^7Y^4 + 23760X^3Y^8 + 5280X^1Y^{10} - 4950X^9 + 51480X^7Y^2 + 41580X^5Y^4 - 27720X^3Y^6 - 12870X^1Y^8 + 2880X^7 - 30240X^5Y^2 + 10080X^1Y^6 - 504X^5 + 5040X^3Y^2 - 2520X^1Y^4]$$

$$\frac{\delta Z_{12}^8}{\delta x} = \sqrt{26}[792X^{11} - 17160X^9Y^2 + 7920X^7Y^4 + 33264X^5Y^6 + 3960X^3Y^8 - 3432X^1Y^{10} - 1100X^9 + 23760X^7Y^2 - 27720X^5Y^4 - 18480X^3Y^6 + 5940X^1Y^8 + 360X^7 - 7560X^5Y^2 + 12600X^3Y^4 - 2520X^1Y^6]$$

$$\frac{\delta Z_{12}^{10}}{\delta x} = \sqrt{26}[144X^{11} - 5280X^9Y^2 + 15840X^7Y^4 - 7920X^3Y^8 + 1056X^1Y^{10} - 110X^9 + 3960X^7Y^2 - 13860X^5Y^4 + 9240X^3Y^6 - 990X^1Y^8]$$

$$\frac{\delta Z_{12}^{12}}{\delta x} = \sqrt{26}[12X^{11} - 660X^9Y^2 + 3960X^7Y^4 - 5544X^5Y^6 + 1980X^3Y^8 - 132X^1Y^{10}]$$

$$\frac{\delta Z_{13}^{-13}}{\delta x} = \sqrt{28}[156X^{11}Y^1 - 2860X^9Y^3 + 10296X^7Y^5 - 10296X^5Y^7 + 2860X^3Y^9 - 156X^1Y^{11}]$$

$$\frac{\delta Z_{13}^{-11}}{\delta x} = \sqrt{28}[1716X^{11}Y^1 - 20020X^9Y^3 + 30888X^7Y^5 + 10296X^5Y^7 - 14300X^3Y^9 + 1404X^1Y^{11} - 1320X^9Y^1 + 15840X^7Y^3 - 33264X^5Y^5 + 15840X^3Y^7 - 1320X^1Y^9]$$

$$\frac{\delta Z_{13}^{-9}}{\delta x} = \sqrt{28}[8424X^{11}Y^1 - 51480X^9Y^3 - 20592X^7Y^5 + 61776X^5Y^7 + 17160X^3Y^9 - 5304X^1Y^{11} - 11880X^9Y^1 + 79200X^7Y^3 - 33264X^5Y^5 - 47520X^3Y^7 + 9240X^1Y^9 + 3960X^7Y^1 - 27720X^5Y^3 + 27720X^3Y^5 - 3960X^1Y^7]$$

$$\frac{\delta Z_{13}^{-7}}{\delta x} = \sqrt{28}[24024X^{11}Y^1 - 40040X^9Y^3 - 144144X^7Y^5 - 61776X^5Y^7 + 28600X^3Y^9 + 10296X^1Y^{11} - 46200X^9Y^1 + 110880X^7Y^3 + 166320X^5Y^5 - 15840X^3Y^7 - 25080X^1Y^9 + 27720X^7Y^1 - 83160X^5Y^3 - 27720X^3Y^5 + 19800X^1Y^7 - 5040X^5Y^1 + 16800X^3Y^3 - 5040X^1Y^5]$$

$$\frac{\delta Z_{13}^{-5}}{\delta x} = \sqrt{28}[42900X^{11}Y^1 + 71500X^9Y^3 - 51480X^7Y^5 - 154440X^5Y^7 - 82940X^3Y^9 - 8580X^1Y^{11} - 99000X^9Y^1 - 79200X^7Y^3 + 166320X^5Y^5 + 174240X^3Y^7 + 27720X^1Y^9 + 79200X^7Y^1 - 110880X^3Y^5 - 31680X^1Y^7 - 25200X^5Y^1 + 16800X^3Y^3 + 15120X^1Y^5 + 2520X^3Y^1 - 2520X^1Y^3]$$

$$\frac{\delta Z_{13}^{-3}}{\delta x} = \sqrt{28}[46332X^{11}Y^1 + 180180X^9Y^3 + 257400X^7Y^5 + 154440X^5Y^7 + 25740X^3Y^9 - 5148X^1Y^{11} - 118800X^9Y^1 - 348480X^7Y^3 - 332640X^5Y^5 - 95040X^3Y^7 + 7920X^1Y^9 + 110880X^7Y^1 + 221760X^5Y^3 + 110880X^3Y^5 - 45360X^5Y^1 - 50400X^3Y^3 - 5040X^1Y^5 + 7560X^3Y^1 + 2520X^1Y^3 - 336X^1Y^1]$$

$$\frac{\delta Z_{13}^{-1}}{\delta x} = \sqrt{28}[20592X^{11}Y^1 + 102960X^9Y^3 + 205920X^7Y^5 + 205920X^5Y^7 + 102960X^3Y^9 + 20592X^1Y^{11} - 55440X^9Y^1 - 221760X^7Y^3 - 332640X^5Y^5 - 221760X^3Y^7 - 55440X^1Y^9 + 55440X^7Y^1 + 166320X^5Y^3 + 166320X^3Y^5 + 55440X^1Y^7 - 25200X^5Y^1 - 50400X^3Y^3 - 25200X^1Y^5 + 5040X^3Y^1 + 5040X^1Y^3 - 336X^1Y^1]$$

$$\frac{\delta Z_{13}^1}{\delta x} = \sqrt{28}[22308X^{12} + 113256X^{10}Y^2 + 231660X^8Y^4 + 240240X^6Y^6 + 128700X^4Y^8 + 30888X^2Y^{10} + 1716Y^{12} - 60984X^{10} - 249480X^8Y^2 - 388080X^6Y^4 - 277200X^4Y^6 - 83160X^2Y^8 - 5544Y^{10} + 62370X^8 + 194040X^6Y^2 + 207900X^4Y^4 + 83160X^2Y^6 + 6930Y^8 - 29400X^6 - 63000X^4Y^2 - 37800X^2Y^4 - 4200Y^6 + 6300X^4 + 7560X^2Y^2 + 1260Y^4 - 504X^2 - 168Y^2 + 7]$$

$$\frac{\delta Z_{13}^3}{\delta x} = \sqrt{28}[16731X^{12} + 28314X^{10}Y^2 - 57915X^8Y^4 - 180180X^6Y^6 - 160875X^4Y^8 - 54054X^2Y^{10} - 3861Y^{12} - 43560X^{10} - 35640X^8Y^2 + 166320X^6Y^4 + 277200X^4Y^6 + 130680X^2Y^8 + 11880Y^{10} + 41580X^8 - 138600X^4Y^4 - 110880X^2Y^6 - 13860Y^8 - 17640X^6 + 12600X^4Y^2 + 37800X^2Y^4 + 7560Y^6 + 3150X^4 - 3780X^2Y^2 - 1890Y^4 - 168X^2 + 168Y^2]$$

$$\frac{\delta Z_{13}^5}{\delta x} = \sqrt{28}[9295X^{12} - 47190X^{10}Y^2 - 186615X^8Y^4 - 180180X^6Y^6 - 32175X^4Y^8 + 21450X^2Y^{10} + 3575Y^{12} - 21780X^{10} + 124740X^8Y^2 + 304920X^6Y^4 + 138600X^4Y^6 - 29700X^2Y^8 - 9900Y^{10} + 17820X^8 - 110880X^6Y^2 - 138600X^4Y^4 + 9900Y^8 - 5880X^6 + 37800X^4Y^2 + 12600X^2Y^4 - 4200Y^6 + 630X^4 - 3780X^2Y^2 + 630Y^4]$$

$$\frac{\delta Z_{\delta x}^7}{\delta x} = \sqrt{28}[3718X^{12} - 56628X^{10}Y^2 - 64350X^8Y^4 + 72072X^6Y^6 + 90090X^4Y^8 + 12012X^2Y^{10} - 2002Y^{12} - 7260X^{10} + 112860X^8Y^2 + 27720X^6Y^4 - 138600X^4Y^6 - 41580X^2Y^8 + 4620Y^{10} + 4455X^8 - 69300X^6Y^2 + 34650X^4Y^4 + 41580X^2Y^6 - 3465Y^8 - 840X^6 + 12600X^4Y^2 - 12600X^2Y^4 + 840Y^6]$$

$$\frac{\delta Z_{\delta x}^9}{\delta x} = \sqrt{28}[1014X^{12} - 29172X^{10}Y^2 + 38610X^8Y^4 + 72072X^6Y^6 - 12870X^4Y^8 - 15444X^2Y^{10} + 702Y^{12} - 1452X^{10} + 41580X^8Y^2 - 83160X^6Y^4 - 27720X^4Y^6 + 29700X^2Y^8 - 1188Y^{10} + 495X^8 - 13860X^6Y^2 + 34650X^4Y^4 - 13860X^2Y^6 + 495Y^8]$$

$$\frac{\delta Z_{\delta x}^{11}}{\delta x} = \sqrt{28}[169X^{12} - 7722X^{10}Y^2 + 32175X^8Y^4 - 12012X^6Y^6 - 19305X^4Y^8 + 6006X^2Y^{10} - 143Y^{12} - 132X^{10} + 5940X^8Y^2 - 27720X^6Y^4 + 27720X^4Y^6 - 5940X^2Y^8 + 132Y^{10}]$$

$$\frac{\delta Z_{\delta x}^{13}}{\delta x} = \sqrt{28}[13X^{12} - 858X^{10}Y^2 + 6435X^8Y^4 - 12012X^6Y^6 + 6435X^4Y^8 - 858X^2Y^{10} + 13Y^{12}]$$

$$\frac{\delta Z_{\delta x}^{-14}}{\delta x} = \sqrt{30}[182X^{12}Y^1 - 4004X^{10}Y^3 + 18018X^8Y^5 - 24024X^6Y^7 + 10010X^4Y^9 - 1092X^2Y^{11} + 14Y^{13}]$$

$$\frac{\delta Z_{\delta x}^{-12}}{\delta x} = \sqrt{30}[2184X^{12}Y^1 - 32032X^{10}Y^3 + 72072X^8Y^5 - 40040X^4Y^9 + 8736X^2Y^{11} - 168Y^{13} - 1716X^{10}Y^1 + 25740X^8Y^3 - 72072X^6Y^5 + 51480X^4Y^7 - 8580X^2Y^9 + 156Y^{11}]$$

$$\frac{\delta Z_{\delta x}^{-10}}{\delta x} = \sqrt{30}[11830X^{12}Y^1 - 100100X^{10}Y^3 + 18018X^8Y^5 + 168168X^6Y^7 + 10010X^4Y^9 - 27300X^2Y^{11} + 910Y^{13} - 17160X^{10}Y^1 + 154440X^8Y^3 - 144144X^6Y^5 - 102960X^4Y^7 + 51480X^2Y^9 - 1560Y^{11} + 5940X^8Y^1 - 55440X^6Y^3 + 83160X^4Y^5 - 23760X^2Y^7 + 660Y^9]$$

$$\frac{\delta Z_{\delta x}^{-8}}{\delta x} = \sqrt{30}[37856X^{12}Y^1 - 128128X^{10}Y^3 - 288288X^8Y^5 + 160160X^4Y^9 + 34944X^2Y^{11} - 2912Y^{13} - 75504X^{10}Y^1 + 308880X^8Y^3 + 288288X^6Y^5 - 205920X^4Y^7 - 102960X^2Y^9 + 6864Y^{11} + 47520X^8Y^1 - 221760X^6Y^3 + 95040X^2Y^7 - 5280Y^9 - 9240X^6Y^1 + 46200X^4Y^3 - 27720X^2Y^5 + 1320Y^7]$$

$$\frac{\delta Z_{\delta x}^{-6}}{\delta x} = \sqrt{30}[78078X^{12}Y^1 + 44044X^{10}Y^3 - 342342X^8Y^5 - 504504X^6Y^7 - 190190X^4Y^9 + 12012X^2Y^{11} + 6006Y^{13} - 188760X^{10}Y^1 + 51480X^8Y^3 + 720720X^6Y^5 + 514800X^4Y^7 + 17160X^2Y^9 - 17160Y^{11} + 160380X^8Y^1 - 166320X^6Y^3 - 415800X^4Y^5 - 71280X^2Y^7 + 17820Y^9 - 55440X^6Y^1 + 92400X^4Y^3 + 55440X^2Y^5 - 7920Y^7 + 6300X^4Y^1 - 12600X^2Y^3 + 1260Y^5]$$

$$\frac{\delta Z_{\delta x}^{-4}}{\delta x} = \sqrt{30}[104104X^{12}Y^1 + 352352X^{10}Y^3 + 360360X^8Y^5 - 200200X^4Y^9 - 96096X^2Y^{11} - 8008Y^{13} - 283140X^{10}Y^1 - 694980X^8Y^3 - 360360X^6Y^5 + 257400X^4Y^7 + 231660X^2Y^9 + 25740Y^{11} + 285120X^8Y^1 + 443520X^6Y^3 - 190080X^2Y^7 - 31680Y^9 - 129360X^6Y^1 - 92400X^4Y^3 + 55440X^2Y^5 + 18480Y^7 + 25200X^4Y^1 - 5040Y^5 - 1512X^2Y^1 + 504Y^3]$$

$$\frac{\delta Z_{\delta x}^{-2}}{\delta x} = \sqrt{30}[78078X^{12}Y^1 + 396396X^{10}Y^3 + 810810X^8Y^5 + 840840X^6Y^7 + 450450X^4Y^9 + 108108X^2Y^{11} + 6006Y^{13} - 226512X^{10}Y^1 - 926640X^8Y^3 - 1441440X^6Y^5 - 1029600X^4Y^7 - 308880X^2Y^9 - 20592Y^{11} + 249480X^8Y^1 + 776160X^6Y^3 + 831600X^4Y^5 + 332640X^2Y^7 + 27720Y^9 - 129360X^6Y^1 - 277200X^4Y^3 - 166320X^2Y^5 - 18480Y^7 + 31500X^4Y^1 + 37800X^2Y^3 + 6300Y^5 - 3024X^2Y^1 - 1008Y^3 + 56Y^1]$$

$$\frac{\delta Z_{\delta x}^0}{\delta x} = \sqrt{15}[48048X^{13} + 288288X^{11}Y^2 + 720720X^9Y^4 + 960960X^7Y^6 + 720720X^5Y^8 + 288288X^3Y^{10} + 48048X^1Y^{12} - 144144X^{11} - 720720X^9Y^2 - 1441440X^7Y^4 - 1441440X^5Y^6 - 720720X^3Y^8 - 144144X^1Y^{10} + 166320X^9 + 665280X^7Y^2 + 997920X^5Y^4 + 665280X^3Y^6 + 166320X^1Y^8 - 92400X^7 - 277200X^5Y^2 - 277200X^3Y^4 - 92400X^1Y^6 + 25200X^5 + 50400X^3Y^2 + 25200X^1Y^4 - 3024X^3 - 3024X^1Y^2 + 112X^1]$$

$$\frac{\delta Z_{\delta x}^2}{\delta x} = \sqrt{30}[42042X^{13} + 180180X^{11}Y^2 + 270270X^9Y^4 + 120120X^7Y^6 - 90090X^5Y^8 - 108108X^3Y^{10} - 30030X^1Y^{12} - 123552X^{11} - 411840X^9Y^2 - 411840X^7Y^4 + 205920X^3Y^8 + 82368X^1Y^{10} + 138600X^9 + 332640X^7Y^2 + 166320X^5Y^4 - 110880X^3Y^6 - 83160X^1Y^8 - 73920X^7 - 110880X^5Y^2 + 36960X^1Y^6 + 18900X^5 + 12600X^3Y^2 - 6300X^1Y^4 - 2016X^3 + 56X^1]$$

$$\frac{\delta Z_{\delta x}^4}{\delta x} = \sqrt{30}[28028X^{13} - 24024X^{11}Y^2 - 380380X^9Y^4 - 720720X^7Y^6 - 540540X^5Y^8 - 152152X^3Y^{10} - 4004X^1Y^{12} - 77220X^{11} + 128700X^9Y^2 + 875160X^7Y^4 + 1081080X^5Y^6 + 437580X^3Y^8 + 25740X^1Y^{10} + 79200X^9 - 190080X^7Y^2 - 665280X^5Y^4 - 443520X^3Y^6 - 47520X^1Y^8 - 36960X^7 + 110880X^5Y^2 + 184800X^3Y^4 + 36960X^1Y^6 + 7560X^5 - 25200X^3Y^2 - 12600X^1Y^4 - 504X^3 + 1512X^1Y^2]$$

$$\frac{\delta Z_{\delta x}^6}{\delta x} = \sqrt{30}[14014X^{13} - 132132X^{11}Y^2 - 390390X^9Y^4 - 216216X^7Y^6 + 162162X^5Y^8 + 156156X^3Y^{10} + 22022X^1Y^{12} - 34320X^{11} + 343200X^9Y^2 + 617760X^7Y^4 - 308880X^3Y^8 - 68640X^1Y^{10} + 29700X^9 - 308880X^7Y^2 - 249480X^5Y^4 + 166320X^3Y^6 + 77220X^1Y^8 - 10560X^7 + 110880X^5Y^2 - 36960X^1Y^6 + 1260X^5 - 12600X^3Y^2 + 6300X^1Y^4]$$

$$\frac{\delta Z_{\delta x}^8}{\delta x} = \sqrt{30}[5096X^{13} - 109200X^{11}Y^2 - 40040X^9Y^4 + 288288X^7Y^6 + 216216X^5Y^8 - 16016X^3Y^{10} - 18200X^1Y^{12} - 10296X^{11} + 223080X^9Y^2 - 102960X^7Y^4 - 432432X^5Y^6 - 51480X^3Y^8 + 44616X^1Y^{10} + 6600X^9 - 142560X^7Y^2 + 166320X^5Y^4 + 110880X^3Y^6 - 35640X^1Y^8 - 1320X^7 + 27720X^5Y^2 - 46200X^3Y^4 + 9240X^1Y^6]$$

$$\frac{\delta Z_{\delta x}^{10}}{\delta x} = \sqrt{30}[1274X^{13} - 46956X^{11}Y^2 + 110110X^9Y^4 + 120120X^7Y^6 - 90090X^5Y^8 - 44044X^3Y^{10} + 7826X^1Y^{12} - 1872X^{11} + 68640X^9Y^2 - 205920X^7Y^4 + 102960X^3Y^8 - 13728X^1Y^{10} + 660X^9 - 23760X^7Y^2 + 83160X^5Y^4 - 55440X^3Y^6 + 5940X^1Y^8]$$

$$\frac{\delta Z_{\delta x}^{12}}{\delta x} = \sqrt{30}[196X^{13} - 10920X^{11}Y^2 + 60060X^9Y^4 - 48048X^7Y^6 - 36036X^5Y^8 + 24024X^3Y^{10} - 1820X^1Y^{12} - 156X^{11} + 8580X^9Y^2 - 51480X^7Y^4 + 72072X^5Y^6 - 25740X^3Y^8 + 1716X^1Y^{10}]$$

$$\frac{\delta Z_{\delta x}^{14}}{\delta x} = \sqrt{30}[14X^{13} - 1092X^{11}Y^2 + 10010X^9Y^4 - 24024X^7Y^6 + 18018X^5Y^8 - 4004X^3Y^{10} + 182X^1Y^{12}]$$

$$\frac{\delta Z_{15}^{-15}}{\delta x} = \sqrt{32}[210X^{13}Y^1 - 5460X^{11}Y^3 + 30030X^9Y^5 - 51480X^7Y^7 + 30030X^5Y^9 - 5460X^3Y^{11} + 210X^1Y^{13}]$$

$$\frac{\delta Z_{15}^{-13}}{\delta x} = \sqrt{32}[2730X^{13}Y^1 - 49140X^{11}Y^3 + 150150X^9Y^5 - 51480X^7Y^7 - 90090X^5Y^9 + 38220X^3Y^{11} - 2310X^1Y^{13} - 2184X^{11}Y^1 + 40040X^9Y^3 - 144144X^7Y^5 + 144144X^5Y^7 - 40040X^3Y^9 + 2184X^1Y^{11}]$$

$$\frac{\delta Z_{15}^{-11}}{\delta x} = \sqrt{32}[16170X^{13}Y^1 - 180180X^{11}Y^3 + 150150X^9Y^5 + 360360X^7Y^7 - 90090X^5Y^9 - 92820X^3Y^{11} + 11130X^1Y^{13} - 24024X^{11}Y^1 + 280280X^9Y^3 - 432432X^7Y^5 - 144144X^5Y^7 + 200200X^3Y^9 - 19656X^1Y^{11} + 8580X^9Y^1 - 102960X^7Y^3 + 216216X^5Y^5 - 102960X^3Y^7 + 8580X^1Y^9]$$

$$\frac{\delta Z_{15}^{-9}}{\delta x} = \sqrt{32}[57330X^{13}Y^1 - 311220X^{11}Y^3 - 450450X^9Y^5 + 360360X^7Y^7 + 510510X^5Y^9 + 38220X^3Y^{11} - 30030X^1Y^{13} - 117936X^{11}Y^1 + 720720X^9Y^3 + 288288X^7Y^5 - 864864X^5Y^7 - 240240X^3Y^9 + 74256X^1Y^{11} + 77220X^9Y^1 - 514800X^7Y^3 + 216216X^5Y^5 + 308880X^3Y^7 - 60060X^1Y^9 - 15840X^7Y^1 + 110880X^5Y^3 - 110880X^3Y^5 + 15840X^1Y^7]$$

$$\frac{\delta Z_{15}^{-7}}{\delta x} = \sqrt{32}[133770X^{13}Y^1 - 114660X^{11}Y^3 - 1051050X^9Y^5 - 1081080X^7Y^7 - 90090X^5Y^9 + 234780X^3Y^{11} + 46410X^1Y^{13} - 336336X^{11}Y^1 + 560560X^9Y^3 + 2018016X^7Y^5 + 864864X^5Y^7 - 400400X^3Y^9 - 144144X^1Y^{11} + 300300X^9Y^1 - 720720X^7Y^3 - 1081080X^5Y^5 + 102960X^3Y^7 + 163020X^1Y^9 - 110880X^7Y^1 + 332640X^5Y^3 + 110880X^3Y^5 - 79200X^1Y^7 + 13860X^5Y^1 - 46200X^3Y^3 + 13860X^1Y^5]$$

$$\frac{\delta Z_{15}^{-5}}{\delta x} = \sqrt{32}[210210X^{13}Y^1 + 540540X^{11}Y^3 + 30030X^9Y^5 - 1081080X^7Y^7 - 1171170X^5Y^9 - 420420X^3Y^{11} - 30030X^1Y^{13} - 600600X^{11}Y^1 - 1001000X^9Y^3 + 720720X^7Y^5 + 2162160X^5Y^7 + 1161160X^3Y^9 + 120120X^1Y^{11} + 643500X^9Y^1 + 514800X^7Y^3 - 1081080X^5Y^5 - 1132560X^3Y^7 - 180180X^1Y^9 - 316800X^7Y^1 + 443520X^3Y^5 + 126720X^1Y^7 + 69300X^5Y^1 - 46200X^3Y^3 - 41580X^1Y^5 - 5040X^3Y^1 + 5040X^1Y^3]$$

$$\frac{\delta Z_{15}^{-3}}{\delta x} = \sqrt{32}[210210X^{13}Y^1 + 1021020X^{11}Y^3 + 1951950X^9Y^5 + 1801800X^7Y^7 + 750750X^5Y^9 + 60060X^3Y^{11} - 30030X^1Y^{13} - 648648X^{11}Y^1 - 2522520X^9Y^3 - 3603600X^7Y^5 - 2162160X^5Y^7 - 360360X^3Y^9 + 72072X^1Y^{11} + 772200X^9Y^1 + 2265120X^7Y^3 + 2162160X^5Y^5 + 617760X^3Y^7 - 51480X^1Y^9 - 443520X^7Y^1 - 887040X^5Y^3 - 443520X^3Y^5 + 124740X^5Y^1 + 138600X^3Y^3 + 13860X^1Y^5 - 15120X^3Y^1 - 5040X^1Y^3 + 504X^1Y^1]$$

$$\frac{\delta Z_{15}^{-1}}{\delta x} = \sqrt{32}[90090X^{13}Y^1 + 540540X^{11}Y^3 + 1351350X^9Y^5 + 1801800X^7Y^7 + 1351350X^5Y^9 + 540540X^3Y^{11} + 90090X^1Y^{13} - 288288X^{11}Y^1 - 1441440X^9Y^3 - 2882880X^7Y^5 - 2882880X^5Y^7 - 1441440X^3Y^9 - 288288X^1Y^{11} + 360360X^9Y^1 + 1441440X^7Y^3 + 2162160X^5Y^5 + 1441440X^3Y^7 + 360360X^1Y^9 - 221760X^7Y^1 - 665280X^5Y^3 - 665280X^3Y^5 - 221760X^1Y^7 + 69300X^5Y^1 + 138600X^3Y^3 + 69300X^1Y^5 - 10080X^3Y^1 - 10080X^1Y^3 + 504X^1Y^1]$$

$$\frac{\delta Z_{15}^1}{\delta x} = \sqrt{32}[96525X^{14} + 585585X^{12}Y^2 + 1486485X^{10}Y^4 + 2027025X^8Y^6 + 1576575X^6Y^8 + 675675X^4Y^{10} + 135135X^2Y^{12} + 6435Y^{14} - 312312X^{12} - 1585584X^{10}Y^2 - 3243240X^8Y^4 - 3363360X^6Y^6 - 1801800X^4Y^8 - 432432X^2Y^{10} - 24024Y^{12} + 396396X^{10} + 1621620X^8Y^2 + 2522520X^6Y^4 + 1801800X^4Y^6 + 540540X^2Y^8 + 36036Y^{10} - 249480X^8 - 776160X^6Y^2 - 831600X^4Y^4 - 332640X^2Y^6 - 27720Y^8 + 80850X^6 + 173250X^4Y^2 + 103950X^2Y^4 + 11550Y^6 - 12600X^4 - 15120X^2Y^2 - 2520Y^4 + 756X^2 + 252Y^2 - 8]$$

$$\frac{\delta Z_{15}^3}{\delta x} = \sqrt{32}[75075X^{14} + 195195X^{12}Y^2 - 165165X^{10}Y^4 - 1126125X^8Y^6 - 1576575X^6Y^8 - 975975X^4Y^{10} - 255255X^2Y^{12} - 15015Y^{14} - 234234X^{12} - 396396X^{10}Y^2 + 810810X^8Y^4 + 2522520X^6Y^6 + 2252250X^4Y^8 + 756756X^2Y^{10} + 54054Y^{12} + 283140X^{10} + 231660X^8Y^2 - 1081080X^6Y^4 - 1801800X^4Y^6 - 849420X^2Y^8 - 77220Y^{10} - 166320X^8 + 554400X^4Y^4 + 443520X^2Y^6 + 55440Y^8 + 48510X^6 - 34650X^4Y^2 - 103950X^2Y^4 - 20790Y^6 - 6300X^4 + 7560X^2Y^2 + 3780Y^4 + 252X^2 - 252Y^2]$$

$$\frac{\delta Z_{15}^5}{\delta x} = \sqrt{32}[45045X^{14} - 195195X^{12}Y^2 - 1156155X^{10}Y^4 - 1756755X^8Y^6 - 945945X^6Y^8 + 15015X^4Y^{10} + 135135X^2Y^{12} + 15015Y^{14} - 130130X^{12} + 660660X^{10}Y^2 + 2612610X^8Y^4 + 2522520X^6Y^6 + 450450X^4Y^8 - 300300X^2Y^{10} - 50050Y^{12} + 141570X^{10} - 810810X^8Y^2 - 1981980X^6Y^4 - 900900X^4Y^6 + 193050X^2Y^8 + 64350Y^{10} - 71280X^8 + 443520X^6Y^2 + 554400X^4Y^4 - 39600Y^8 + 16170X^6 - 103950X^4Y^2 - 34650X^2Y^4 + 11550Y^6 - 1260X^4 + 7560X^2Y^2 - 1260Y^4]$$

$$\frac{\delta Z_{15}^7}{\delta x} = \sqrt{32}[20475X^{14} - 301665X^{12}Y^2 - 645645X^{10}Y^4 + 135135X^8Y^6 + 945945X^6Y^8 + 525525X^4Y^{10} + 28665X^2Y^{12} - 9555Y^{14} - 52052X^{12} + 792792X^{10}Y^2 + 900900X^8Y^4 - 1009008X^6Y^6 - 1261260X^4Y^8 - 168168X^2Y^{10} + 28028Y^{12} + 47190X^{10} - 733590X^8Y^2 - 180180X^6Y^4 + 900900X^4Y^6 + 270270X^2Y^8 - 30030Y^{10} - 17820X^8 + 277200X^6Y^2 - 138600X^4Y^4 - 166320X^2Y^6 + 13860Y^8 + 2310X^6 - 34650X^4Y^2 + 34650X^2Y^4 - 2310Y^6]$$

$$\frac{\delta Z_{15}^9}{\delta x} = \sqrt{32}[6825X^{14} - 195195X^{12}Y^2 + 105105X^{10}Y^4 + 765765X^8Y^6 + 315315X^6Y^8 - 225225X^4Y^{10} - 77805X^2Y^{12} + 4095Y^{14} - 14196X^{12} + 408408X^{10}Y^2 - 540540X^8Y^4 - 1009008X^6Y^6 + 180180X^4Y^8 + 216216X^2Y^{10} - 9828Y^{12} + 9438X^{10} - 270270X^8Y^2 + 540540X^6Y^4 + 180180X^4Y^6 - 193050X^2Y^8 + 7722Y^{10} - 1980X^8 + 55440X^6Y^2 - 138600X^4Y^4 + 55440X^2Y^6 - 1980Y^8]$$

$$\frac{\delta Z_{15}^{11}}{\delta x} = \sqrt{32}[1575X^{14} - 72345X^{12}Y^2 + 255255X^{10}Y^4 + 135135X^8Y^6 - 315315X^6Y^8 - 75075X^4Y^{10} + 45045X^2Y^{12} - 1155Y^{14} - 2366X^{12} + 108108X^{10}Y^2 - 450450X^8Y^4 + 168168X^6Y^6 + 270270X^4Y^8 - 84084X^2Y^{10} + 2002Y^{12} + 858X^{10} - 38610X^8Y^2 + 180180X^6Y^4 - 180180X^4Y^6 + 38610X^2Y^8 - 858Y^{10}]$$

$$\frac{\delta Z_{15}^{13}}{\delta x} = \sqrt{32}[225X^{14} - 15015X^{12}Y^2 + 105105X^{10}Y^4 - 135135X^8Y^6 - 45045X^6Y^8 + 75075X^4Y^{10} - 12285X^2Y^{12} + 195Y^{14} - 182X^{12} + 12012X^{10}Y^2 - 90090X^8Y^4 + 168168X^6Y^6 - 90090X^4Y^8 + 12012X^2Y^{10} - 182Y^{12}]$$

$$\frac{\delta Z_{15}^{15}}{\delta x} = \sqrt{32}[15X^{14} - 1365X^{12}Y^2 + 15015X^{10}Y^4 - 45045X^8Y^6 + 45045X^6Y^8 - 15015X^4Y^{10} + 1365X^2Y^{12} - 15Y^{14}]$$

3 Y slope ($\frac{\delta Z}{\delta Y}$)

$$\frac{\delta Z_0^0}{\delta y} = 1$$

$$\frac{\delta Z_1^{-1}}{\delta y} = 2[1]$$

$$\frac{\delta Z_1^1}{\delta y} = 2$$

$$\frac{\delta Z_2^{-2}}{\delta y} = \sqrt{6}[2X^1]$$

$$\frac{\delta Z_2^0}{\delta y} = \sqrt{3}[4Y^1]$$

$$\frac{\delta Z_2^2}{\delta y} = \sqrt{6}[2Y^1]$$

$$\frac{\delta Z_3^{-3}}{\delta y} = \sqrt{8}[3X^2 - 3Y^2]$$

$$\frac{\delta Z_3^{-1}}{\delta y} = \sqrt{8}[3X^2 + 9Y^2 - 2]$$

$$\frac{\delta Z_3^1}{\delta y} = \sqrt{8}[6X^1Y^1]$$

$$\frac{\delta Z_3^3}{\delta y} = \sqrt{8}[6X^1Y^1]$$

$$\frac{\delta Z_4^{-4}}{\delta y} = \sqrt{10}[4X^3 - 12X^1Y^2]$$

$$\frac{\delta Z_4^{-2}}{\delta y} = \sqrt{10}[8X^3 + 24X^1Y^2 - 6X^1]$$

$$\frac{\delta Z_4^0}{\delta y} = \sqrt{5}[24X^2Y^1 + 24Y^3 - 12Y^1]$$

$$\frac{\delta Z_4^2}{\delta y} = \sqrt{10}[16Y^3 + 6Y^1]$$

$$\frac{\delta Z_4^4}{\delta y} = \sqrt{10}[12X^2Y^1 + 4Y^3]$$

$$\frac{\delta Z_5^{-5}}{\delta y} = \sqrt{12}[5X^4 - 30X^2Y^2 + 5Y^4]$$

$$\frac{\delta Z_5^{-3}}{\delta y} = \sqrt{12}[15X^4 + 30X^2Y^2 - 25Y^4 - 12X^2 + 12Y^2]$$

$$\frac{\delta Z_5^{-1}}{\delta y} = \sqrt{12}[10X^4 + 60X^2Y^2 + 50Y^4 - 12X^2 - 36Y^2 + 3]$$

$$\frac{\delta Z_5^1}{\delta y} = \sqrt{12}[40X^3Y^1 + 40X^1Y^3 - 24X^1Y^1]$$

$$\frac{\delta Z_5^3}{\delta y} = \sqrt{12}[20X^3Y^1 - 60X^1Y^3 + 24X^1Y^1]$$

$$\frac{\delta Z_5^5}{\delta y} = \sqrt{12}[20X^3Y^1 + 20X^1Y^3]$$

$$\frac{\delta Z_6^{-6}}{\delta y} = \sqrt{14}[6X^5 - 60X^3Y^2 + 30X^1Y^4]$$

$$\frac{\delta Z_6^{-4}}{\delta y} = \sqrt{14}[24X^5 - 120X^1Y^4 - 20X^3 + 60X^1Y^2]$$

$$\frac{\delta Z_6^{-2}}{\delta y} = \sqrt{14}[30X^5 + 180X^3Y^2 + 150X^1Y^4 - 40X^3 - 120X^1Y^2 + 12X^1]$$

$$\frac{\delta Z_6^0}{\delta y} = \sqrt{7}[120X^4Y^1 + 240X^2Y^3 + 120Y^5 - 120X^2Y^1 - 120Y^3 + 24Y^1]$$

$$\frac{\delta Z_6^2}{\delta y} = \sqrt{14}[30X^4Y^1 - 60X^2Y^3 - 90Y^5 + 80Y^3 - 12Y^1]$$

$$\frac{\delta Z_6^4}{\delta y} = \sqrt{14}[60X^4Y^1 - 120X^2Y^3 + 36Y^5 + 60X^2Y^1 - 20Y^3]$$

$$\frac{\delta Z_6^6}{\delta y} = \sqrt{14}[30X^4Y^1 + 60X^2Y^3 - 6Y^5]$$

$$\frac{\delta Z_7^{-7}}{\delta y} = 4[7X^6 - 105X^4Y^2 + 105X^2Y^4 - 7Y^6]$$

$$\frac{\delta Z_7^{-5}}{\delta y} = 4[35X^6 - 105X^4Y^2 - 315X^2Y^4 + 49Y^6 - 30X^4 + 180X^2Y^2 - 30Y^4]$$

$$\frac{\delta Z_7^{-3}}{\delta y} = 4[63X^6 + 315X^4Y^2 + 105X^2Y^4 - 147Y^6 - 90X^4 - 180X^2Y^2 + 150Y^4 + 30X^2 - 30Y^2]$$

$$\frac{\delta Z_7^{-1}}{\delta y} = 4[35X^6 + 315X^4Y^2 + 525X^2Y^4 + 245Y^6 - 60X^4 - 360X^2Y^2 - 300Y^4 + 30X^2 + 90Y^2 - 4]$$

$$\frac{\delta Z_7^1}{\delta y} = 4[210X^5Y^1 + 420X^3Y^3 + 210X^1Y^5 - 240X^3Y^1 - 240X^1Y^3 + 60X^1Y^1]$$

$$\frac{\delta Z_7^3}{\delta y} = 4[42X^5Y^1 - 420X^3Y^3 - 378X^1Y^5 + 120X^3Y^1 + 360X^1Y^3 - 60X^1Y^1]$$

$$\frac{\delta Z_7^5}{\delta y} = 4[126X^5Y^1 - 140X^3Y^3 + 210X^1Y^5 + 120X^3Y^1 - 120X^1Y^3]$$

$$\frac{\delta Z_7^7}{\delta y} = 4[42X^5Y^1 + 140X^3Y^3 - 42X^1Y^5]$$

$$\frac{\delta Z_8^{-8}}{\delta y} = \sqrt{18}[8X^7 - 168X^5Y^2 + 280X^3Y^4 - 56X^1Y^6]$$

$$\frac{\delta Z_8^{-6}}{\delta y} = \sqrt{18}[48X^7 - 336X^5Y^2 - 560X^3Y^4 + 336X^1Y^6 - 42X^5 + 420X^3Y^2 - 210X^1Y^4]$$

$$\frac{\delta Z_8^{-4}}{\delta y} = \sqrt{18}[112X^7 + 336X^5Y^2 - 560X^3Y^4 - 784X^1Y^6 - 168X^5 + 840X^1Y^4 + 60X^3 - 180X^1Y^2]$$

$$\frac{\delta Z_8^{-2}}{\delta y} = \sqrt{18}[112X^7 + 1008X^5Y^2 + 1680X^3Y^4 + 784X^1Y^6 - 210X^5 - 1260X^3Y^2 - 1050X^1Y^4 + 120X^3 + 360X^1Y^2 - 20X^1]$$

$$\frac{\delta Z_8^0}{\delta y} = 3[560X^6Y^1 + 1680X^4Y^3 + 1680X^2Y^5 + 560Y^7 - 840X^4Y^1 - 1680X^2Y^3 - 840Y^5 + 360X^2Y^1 + 360Y^3 - 40Y^1]$$

$$\frac{\delta Z_8^2}{\delta y} = \sqrt{18}[224X^6Y^1 - 672X^2Y^5 - 448Y^7 - 210X^4Y^1 + 420X^2Y^3 + 630Y^5 - 240Y^3 + 20Y^1]$$

$$\frac{\delta Z_8^4}{\delta y} = \sqrt{18}[224X^6Y^1 - 1120X^4Y^3 - 672X^2Y^5 + 224Y^7 + 420X^4Y^1 + 840X^2Y^3 - 252Y^5 - 180X^2Y^1 + 60Y^3]$$

$$\frac{\delta Z_8^6}{\delta y} = \sqrt{18}[224X^6Y^1 + 672X^2Y^5 - 64Y^7 + 210X^4Y^1 - 420X^2Y^3 + 42Y^5]$$

$$\frac{\delta Z_8^8}{\delta y} = \sqrt{18}[56X^6Y^1 + 280X^4Y^3 - 168X^2Y^5 + 8Y^7]$$

$$\frac{\delta Z_9^{-9}}{\delta y} = \sqrt{20}[9X^8 - 252X^6Y^2 + 630X^4Y^4 - 252X^2Y^6 + 9Y^8]$$

$$\frac{\delta Z_9^{-7}}{\delta y} = \sqrt{20}[63X^8 - 756X^6Y^2 - 630X^4Y^4 + 1260X^2Y^6 - 81Y^8 - 56X^6 + 840X^4Y^2 - 840X^2Y^4 + 56Y^6]$$

$$\frac{\delta Z_9^{-5}}{\delta y} = \sqrt{20}[180X^8 - 2520X^4Y^4 - 2016X^2Y^6 + 324Y^8 - 280X^6 + 840X^4Y^2 + 2520X^2Y^4 - 392Y^6 + 105X^4 - 630X^2Y^2 + 105Y^4]$$

$$\frac{\delta Z_9^{-3}}{\delta y} = \sqrt{20}[252X^8 + 2016X^6Y^2 + 2520X^4Y^4 - 756Y^8 - 504X^6 - 2520X^4Y^2 - 840X^2Y^4 + 1176Y^6 + 315X^4 + 630X^2Y^2 - 525Y^4 - 60X^2 + 60Y^2]$$

$$\frac{\delta Z_9^{-1}}{\delta y} = \sqrt{20}[126X^8 + 1512X^6Y^2 + 3780X^4Y^4 + 3528X^2Y^6 + 1134Y^8 - 280X^6 - 2520X^4Y^2 - 4200X^2Y^4 - 1960Y^6 + 210X^4 + 1260X^2Y^2 + 1050Y^4 - 60X^2 - 180Y^2 + 5]$$

$$\frac{\delta Z_9^1}{\delta y} = \sqrt{20}[1008X^7Y^1 + 3024X^5Y^3 + 3024X^3Y^5 + 1008X^1Y^7 - 1680X^5Y^1 - 3360X^3Y^3 - 1680X^1Y^5 + 840X^3Y^1 + 840X^1Y^3 - 120X^1Y^1]$$

$$\frac{\delta Z_9^3}{\delta y} = \sqrt{20}[2016X^5Y^3 - 4032X^3Y^5 - 2016X^1Y^7 + 336X^5Y^1 + 3360X^3Y^3 + 3024X^1Y^5 - 420X^3Y^1 - 1260X^1Y^3 + 120X^1Y^1]$$

$$\frac{\delta Z_9^5}{\delta y} = \sqrt{20}[576X^7Y^1 - 2016X^5Y^3 + 1440X^1Y^7 + 1008X^5Y^1 + 1120X^3Y^3 - 1680X^1Y^5 - 420X^3Y^1 + 420X^1Y^3]$$

$$\frac{\delta Z_9^7}{\delta y} = \sqrt{20}[360X^7Y^1 + 504X^5Y^3 + 1512X^3Y^5 - 504X^1Y^7 + 336X^5Y^1 - 1120X^3Y^3 + 336X^1Y^5]$$

$$\frac{\delta Z_9^9}{\delta y} = \sqrt{20}[72X^7Y^1 + 504X^5Y^3 - 504X^3Y^5 + 72X^1Y^7]$$

$$\frac{\delta Z_{10}^{-10}}{\delta y} = \sqrt{22}[10X^9 - 360X^7Y^2 + 1260X^5Y^4 - 840X^3Y^6 + 90X^1Y^8]$$

$$\frac{\delta Z_{10}^{-8}}{\delta y} = \sqrt{22}[80X^9 - 1440X^7Y^2 + 3360X^3Y^6 - 720X^1Y^8 - 72X^7 + 1512X^5Y^2 - 2520X^3Y^4 + 504X^1Y^6]$$

$$\frac{\delta Z_{10}^{-6}}{\delta y} = \sqrt{22}[270X^9 - 1080X^7Y^2 - 6300X^5Y^4 - 2520X^3Y^6 + 2430X^1Y^8 - 432X^7 + 3024X^5Y^2 + 5040X^3Y^4 - 3024X^1Y^6 + 168X^5 - 1680X^3Y^2 + 840X^1Y^4]$$

$$\frac{\delta Z_{10}^{-4}}{\delta y} = \sqrt{22}[480X^9 + 2880X^7Y^2 - 6720X^3Y^6 - 4320X^1Y^8 - 1008X^7 - 3024X^5Y^2 + 5040X^3Y^4 + 7056X^1Y^6 + 672X^5 - 3360X^1Y^4 - 140X^3 + 420X^1Y^2]$$

$$\frac{\delta Z_{10}^{-2}}{\delta y} = \sqrt{22}[420X^9 + 5040X^7Y^2 + 12600X^5Y^4 + 11760X^3Y^6 + 3780X^1Y^8 - 1008X^7 - 9072X^5Y^2 - 15120X^3Y^4 - 7056X^1Y^6 + 840X^5 + 5040X^3Y^2 + 4200X^1Y^4 - 280X^3 - 840X^1Y^2 + 30X^1]$$

$$\frac{\delta Z_y^0}{\delta y} = \sqrt{11}[2520X^8Y^1 + 10080X^6Y^3 + 15120X^4Y^5 + 10080X^2Y^7 + 2520Y^9 - 5040X^6Y^1 - 15120X^4Y^3 - 15120X^2Y^5 - 5040Y^7 + 3360X^4Y^1 + 6720X^2Y^3 + 3360Y^5 - 840X^2Y^1 - 840Y^3 + 60Y^1]$$

$$\frac{\delta Z_{10}^2}{\delta y} = \sqrt{22}[1260X^8Y^1 + 1680X^6Y^3 - 2520X^4Y^5 - 5040X^2Y^7 - 2100Y^9 - 2016X^6Y^1 + 6048X^2Y^5 + 4032Y^7 + 840X^4Y^1 - 1680X^2Y^3 - 2520Y^5 + 560Y^3 - 30Y^1]$$

$$\frac{\delta Z_{10}^4}{\delta y} = \sqrt{22}[720X^8Y^1 - 6720X^6Y^3 - 10080X^4Y^5 - 2880X^2Y^7 + 1200Y^9 + 2016X^6Y^1 + 10080X^4Y^3 + 6048X^2Y^5 - 2016Y^7 - 1680X^4Y^1 - 3360X^2Y^3 + 1008Y^5 + 420X^2Y^1 - 140Y^3]$$

$$\frac{\delta Z_{10}^6}{\delta y} = \sqrt{22}[1170X^8Y^1 - 2520X^6Y^3 + 3780X^4Y^5 + 4680X^2Y^7 - 450Y^9 + 2016X^6Y^1 - 6048X^2Y^5 + 576Y^7 - 840X^4Y^1 + 1680X^2Y^3 - 168Y^5]$$

$$\frac{\delta Z_{10}^8}{\delta y} = \sqrt{22}[540X^8Y^1 + 1680X^6Y^3 + 2520X^4Y^5 - 2160X^2Y^7 + 100Y^9 + 504X^6Y^1 - 2520X^4Y^3 + 1512X^2Y^5 - 72Y^7]$$

$$\frac{\delta Z_{10}^{10}}{\delta y} = \sqrt{22}[90X^8Y^1 + 840X^6Y^3 - 1260X^4Y^5 + 360X^2Y^7 - 10Y^9]$$

$$\frac{\delta Z_{11}^{-11}}{\delta y} = \sqrt{24}[11X^{10} - 495X^8Y^2 + 2310X^6Y^4 - 2310X^4Y^6 + 495X^2Y^8 - 11Y^{10}]$$

$$\frac{\delta Z_{11}^{-9}}{\delta y} = \sqrt{24}[99X^{10} - 2475X^8Y^2 + 2310X^6Y^4 + 6930X^4Y^6 - 3465X^2Y^8 + 121Y^{10} - 90X^8 + 2520X^6Y^2 - 6300X^4Y^4 + 2520X^2Y^6 - 90Y^8]$$

$$\frac{\delta Z_{11}^{-7}}{\delta y} = \sqrt{24}[385X^{10} - 3465X^8Y^2 - 11550X^6Y^4 + 2310X^4Y^6 + 9405X^2Y^8 - 605Y^{10} - 630X^8 + 7560X^6Y^2 + 6300X^4Y^4 - 12600X^2Y^6 + 810Y^8 + 252X^6 - 3780X^4Y^2 + 3780X^2Y^4 - 252Y^6]$$

$$\frac{\delta Z_{11}^{-5}}{\delta y} = \sqrt{24}[825X^{10} + 2475X^8Y^2 - 11550X^6Y^4 - 25410X^4Y^6 - 10395X^2Y^8 + 1815Y^{10} - 1800X^8 + 25200X^4Y^4 + 20160X^2Y^6 - 3240Y^8 + 1260X^6 - 3780X^4Y^2 - 11340X^2Y^4 + 1764Y^6 - 280X^4 + 1680X^2Y^2 - 280Y^4]$$

$$\frac{\delta Z_{11}^{-3}}{\delta y} = \sqrt{24}[990X^{10} + 10890X^8Y^2 + 23100X^6Y^4 + 13860X^4Y^6 - 2970X^2Y^8 - 3630Y^{10} - 2520X^8 - 20160X^6Y^2 - 25200X^4Y^4 + 7560Y^8 + 2268X^6 + 11340X^4Y^2 + 3780X^2Y^4 - 5292Y^6 - 840X^4 - 1680X^2Y^2 + 1400Y^4 + 105X^2 - 105Y^2]$$

$$\frac{\delta Z_{11}^{-1}}{\delta y} = \sqrt{24}[462X^{10} + 6930X^8Y^2 + 23100X^6Y^4 + 32340X^4Y^6 + 20790X^2Y^8 + 5082Y^{10} - 1260X^8 - 15120X^6Y^2 - 37800X^4Y^4 - 35280X^2Y^6 - 11340Y^8 + 1260X^6 + 11340X^4Y^2 + 18900X^2Y^4 + 8820Y^6 - 560X^4 - 3360X^2Y^2 - 2800Y^4 + 105X^2 + 315Y^2 - 6]$$

$$\frac{\delta Z_{11}^1}{\delta y} = \sqrt{24}[4620X^9Y^1 + 18480X^7Y^3 + 27720X^5Y^5 + 18480X^3Y^7 + 4620X^1Y^9 - 10080X^7Y^1 - 30240X^5Y^3 - 30240X^3Y^5 - 10080X^1Y^7 + 7560X^5Y^1 + 15120X^3Y^3 + 7560X^1Y^5 - 2240X^3Y^1 - 2240X^1Y^3 + 210X^1Y^1]$$

$$\frac{\delta Z_{11}^3}{\delta y} = \sqrt{24}[660X^9Y^1 - 7920X^7Y^3 - 27720X^5Y^5 - 29040X^3Y^7 - 9900X^1Y^9 + 20160X^5Y^3 + 40320X^3Y^5 + 20160X^1Y^7 - 1512X^5Y^1 - 15120X^3Y^3 - 13608X^1Y^5 + 1120X^3Y^1 + 3360X^1Y^3 - 210X^1Y^1]$$

$$\frac{\delta Z_{11}^5}{\delta y} = \sqrt{24}[2310X^9Y^1 - 14520X^7Y^3 - 13860X^5Y^5 + 6600X^3Y^7 + 8250X^1Y^9 + 5760X^7Y^1 + 20160X^5Y^3 - 14400X^1Y^7 - 4536X^5Y^1 - 5040X^3Y^3 + 7560X^1Y^5 + 1120X^3Y^1 - 1120X^1Y^3]$$

$$\frac{\delta Z_{11}^7}{\delta y} = \sqrt{24}[2090X^9Y^1 - 1320X^7Y^3 + 13860X^5Y^5 + 9240X^3Y^7 - 3850X^1Y^9 + 3600X^7Y^1 - 5040X^5Y^3 - 15120X^3Y^5 + 5040X^1Y^7 - 1512X^5Y^1 + 5040X^3Y^3 - 1512X^1Y^5]$$

$$\frac{\delta Z_{11}^9}{\delta y} = \sqrt{24}[770X^9Y^1 + 3960X^7Y^3 + 2772X^5Y^5 - 6600X^3Y^7 + 990X^1Y^9 + 720X^7Y^1 - 5040X^5Y^3 + 5040X^3Y^5 - 720X^1Y^7]$$

$$\frac{\delta Z_{11}^{11}}{\delta y} = \sqrt{24}[110X^9Y^1 + 1320X^7Y^3 - 2772X^5Y^5 + 1320X^3Y^7 - 110X^1Y^9]$$

$$\frac{\delta Z_{12}^{-12}}{\delta y} = \sqrt{26}[12X^{11} - 660X^9Y^2 + 3960X^7Y^4 - 5544X^5Y^6 + 1980X^3Y^8 - 132X^1Y^{10}]$$

$$\frac{\delta Z_{12}^{-10}}{\delta y} = \sqrt{26}[120X^{11} - 3960X^9Y^2 + 7920X^7Y^4 + 11088X^5Y^6 - 11880X^3Y^8 + 1320X^1Y^{10} - 110X^9 + 3960X^7Y^2 - 13860X^5Y^4 + 9240X^3Y^6 - 990X^1Y^8]$$

$$\frac{\delta Z_{12}^{-8}}{\delta y} = \sqrt{26}[528X^{11} - 7920X^9Y^2 - 15840X^7Y^4 + 22176X^5Y^6 + 23760X^3Y^8 - 5808X^1Y^{10} - 880X^9 + 15840X^7Y^2 - 36960X^5Y^4 + 7920X^3Y^8 + 360X^7 - 7560X^5Y^2 + 12600X^3Y^4 - 2520X^1Y^6]$$

$$\frac{\delta Z_{12}^{-6}}{\delta y} = \sqrt{26}[1320X^{11} - 1320X^9Y^2 - 39600X^7Y^4 - 55440X^5Y^6 - 3960X^3Y^8 + 14520X^1Y^{10} - 2970X^9 + 11880X^7Y^2 + 69300X^5Y^4 + 27720X^3Y^6 - 26730X^1Y^8 + 2160X^7 - 15120X^5Y^2 - 25200X^3Y^4 + 15120X^1Y^6 - 504X^5 + 5040X^3Y^2 - 2520X^1Y^4]$$

$$\frac{\delta Z_{12}^{-4}}{\delta y} = \sqrt{26}[1980X^{11} + 17820X^9Y^2 + 19800X^7Y^4 - 27720X^5Y^6 - 53460X^3Y^8 - 21780X^1Y^{10} - 5280X^9 - 31680X^7Y^2 + 73920X^3Y^6 + 47520X^1Y^8 + 5040X^7 + 15120X^5Y^2 - 25200X^3Y^4 - 35280X^1Y^6 - 2016X^5 + 10080X^1Y^4 + 280X^3 - 840X^1Y^2]$$

$$\frac{\delta Z_{12}^{-2}}{\delta y} = \sqrt{26}[1584X^{11} + 23760X^9Y^2 + 79200X^7Y^4 + 110880X^5Y^6 + 71280X^3Y^8 + 17424X^1Y^{10} - 4620X^9 - 55440X^7Y^2 - 138600X^5Y^4 - 129360X^3Y^6 - 41580X^1Y^8 + 5040X^7 + 45360X^5Y^2 + 75600X^3Y^4 + 35280X^1Y^6 - 2520X^5 - 15120X^3Y^2 - 12600X^1Y^4 + 560X^3 + 1680X^1Y^2 - 42X^1]$$

$$\frac{\delta Z_{12}^0}{\delta y} = \sqrt{13}[11088X^{10}Y^1 + 55440X^8Y^3 + 110880X^6Y^5 + 110880X^4Y^7 + 55440X^2Y^9 + 11088Y^{11} - 27720X^8Y^1 - 110880X^6Y^3 - 166320X^4Y^5 - 110880X^2Y^7 - 27720Y^9 + 25200X^6Y^1 + 75600X^4Y^3 + 75600X^2Y^5 + 25200Y^7 - 10080X^4Y^1 - 20160X^2Y^3 - 10080Y^5 + 1680X^2Y^1 + 1680Y^3 - 84Y^1]$$

$$\frac{\delta Z_{12}^2}{\delta y} = \sqrt{26}[6336X^{10}Y^1 + 15840X^8Y^3 - 31680X^4Y^7 - 31680X^2Y^9 - 9504Y^{11} - 13860X^8Y^1 - 18480X^6Y^3 + 27720X^4Y^5 + 55440X^2Y^7 + 23100Y^9 + 10080X^6Y^1 - 30240X^2Y^5 - 20160Y^7 - 2520X^4Y^1 + 5040X^2Y^3 + 7560Y^5 - 1120Y^3 + 42Y^1]$$

$$\frac{\delta Z_{12}^4}{\delta y} = \sqrt{26}[1980X^{10}Y^1 - 33660X^8Y^3 - 83160X^6Y^5 - 67320X^4Y^7 - 9900X^2Y^9 + 5940Y^{11} + 7920X^8Y^1 + 73920X^6Y^3 + 110880X^4Y^5 + 31680X^2Y^7 - 13200Y^9 - 10080X^6Y^1 - 50400X^4Y^3 - 30240X^2Y^5 + 10080Y^7 + 5040X^4Y^1 + 10080X^2Y^3 - 3024Y^5 - 840X^2Y^1 + 280Y^3]$$

$$\frac{\delta Z_{12}^6}{\delta y} = \sqrt{26}[5280X^{10}Y^1 - 23760X^8Y^3 + 47520X^4Y^7 + 26400X^2Y^9 - 2640Y^{11} + 12870X^8Y^1 + 27720X^6Y^3 - 41580X^4Y^5 - 51480X^2Y^7 + 4950Y^9 - 10080X^6Y^1 + 30240X^2Y^5 - 2880Y^7 + 2520X^4Y^1 - 5040X^2Y^3 + 504Y^5]$$

$$\frac{\delta Z_{12}^8}{\delta y} = \sqrt{26}[3432X^{10}Y^1 + 3960X^8Y^3 + 33264X^6Y^5 + 7920X^4Y^7 - 17160X^2Y^9 + 792Y^{11} + 5940X^8Y^1 - 18480X^6Y^3 - 27720X^4Y^5 + 23760X^2Y^7 - 1100Y^9 - 2520X^6Y^1 + 12600X^4Y^3 - 7560X^2Y^5 + 360Y^7]$$

$$\frac{\delta Z_{12}^{10}}{\delta y} = \sqrt{26}[1056X^{10}Y^1 + 7920X^8Y^3 - 15840X^4Y^7 + 5280X^2Y^9 - 144Y^{11} + 990X^8Y^1 - 9240X^6Y^3 + 13860X^4Y^5 - 3960X^2Y^7 + 110Y^9]$$

$$\frac{\delta Z_{12}^{12}}{\delta y} = \sqrt{26}[132X^{10}Y^1 + 1980X^8Y^3 - 5544X^6Y^5 + 3960X^4Y^7 - 660X^2Y^9 + 12Y^{11}]$$

$$\frac{\delta Z_{13}^{-13}}{\delta y} = \sqrt{28}[13X^{12} - 858X^{10}Y^2 + 6435X^8Y^4 - 12012X^6Y^6 + 6435X^4Y^8 - 858X^2Y^{10} + 13Y^{12}]$$

$$\frac{\delta Z_{13}^{-11}}{\delta y} = \sqrt{28}[143X^{12} - 6006X^{10}Y^2 + 19305X^8Y^4 + 12012X^6Y^6 - 32175X^4Y^8 + 7722X^2Y^{10} - 169Y^{12} - 132X^{10} + 5940X^8Y^2 - 27720X^6Y^4 + 27720X^4Y^6 - 5940X^2Y^8 + 132Y^{10}]$$

$$\frac{\delta Z_{13}^{-9}}{\delta y} = \sqrt{28}[702X^{12} - 15444X^{10}Y^2 - 12870X^8Y^4 + 72072X^6Y^6 + 38610X^4Y^8 - 29172X^2Y^{10} + 1014Y^{12} - 1188X^{10} + 29700X^8Y^2 - 27720X^6Y^4 - 83160X^4Y^6 + 41580X^2Y^8 - 1452Y^{10} + 495X^8 - 13860X^6Y^2 + 34650X^4Y^4 - 13860X^2Y^6 + 495Y^8]$$

$$\frac{\delta Z_{13}^{-7}}{\delta y} = \sqrt{28}[2002X^{12} - 12012X^{10}Y^2 - 90090X^8Y^4 - 72072X^6Y^6 + 64350X^4Y^8 + 56628X^2Y^{10} - 3718Y^{12} - 4620X^{10} + 41580X^8Y^2 + 138600X^6Y^4 - 27720X^4Y^6 - 112860X^2Y^8 + 7260Y^{10} + 3465X^8 - 41580X^6Y^2 - 34650X^4Y^4 + 69300X^2Y^6 - 4455Y^8 - 840X^6 + 12600X^4Y^2 - 12600X^2Y^4 + 840Y^6]$$

$$\frac{\delta Z_{13}^{-5}}{\delta y} = \sqrt{28}[3575X^{12} + 21450X^{10}Y^2 - 32175X^8Y^4 - 180180X^6Y^6 - 186615X^4Y^8 - 47190X^2Y^{10} + 9295Y^{12} - 9900X^{10} - 29700X^8Y^2 + 138600X^6Y^4 + 304920X^4Y^6 + 124740X^2Y^8 - 21780Y^{10} + 9900X^8 - 138600X^4Y^4 - 110880X^2Y^6 + 17820Y^8 - 4200X^6 + 12600X^4Y^2 + 37800X^2Y^4 - 5880Y^6 + 630X^4 - 3780X^2Y^2 + 630Y^4]$$

$$\frac{\delta Z_{13}^{-3}}{\delta y} = \sqrt{28}[3861X^{12} + 54054X^{10}Y^2 + 160875X^8Y^4 + 180180X^6Y^6 + 57915X^4Y^8 - 28314X^2Y^{10} - 16731Y^{12} - 11880X^{10} - 130680X^8Y^2 - 277200X^6Y^4 - 166320X^4Y^6 + 35640X^2Y^8 + 43560Y^{10} + 13860X^8 + 110880X^6Y^2 + 138600X^4Y^4 - 41580Y^8 - 7560X^6 - 37800X^4Y^2 - 12600X^2Y^4 + 17640Y^6 + 1890X^4 + 3780X^2Y^2 - 3150Y^4 - 168X^2 + 168Y^2]$$

$$\begin{aligned}
\frac{\delta Z_{13}^{-1}}{\delta y} &= \sqrt{28}[1716X^{12} + 30888X^{10}Y^2 + 128700X^8Y^4 + 240240X^6Y^6 + 231660X^4Y^8 + 113256X^2Y^{10} + 22308Y^{12} - 5544X^{10} - 83160X^8Y^2 - 277200X^6Y^4 - 388080X^4Y^6 - 249480X^2Y^8 - 60984Y^{10} + 6930X^8 + 83160X^6Y^2 + 207900X^4Y^4 + 194040X^2Y^6 + 62370Y^8 - 4200X^6 - 37800X^4Y^2 - 63000X^2Y^4 - 29400Y^6 + 1260X^4 + 7560X^2Y^2 + 6300Y^4 - 168X^2 - 504Y^2 + 7] \\
\frac{\delta Z_{13}^1}{\delta y} &= \sqrt{28}[20592X^{11}Y^1 + 102960X^9Y^3 + 205920X^7Y^5 + 205920X^5Y^7 + 102960X^3Y^9 + 20592X^1Y^{11} - 55440X^9Y^1 - 221760X^7Y^3 - 332640X^5Y^5 - 221760X^3Y^7 - 55440X^1Y^9 + 55440X^7Y^1 + 166320X^5Y^3 + 166320X^3Y^5 + 55440X^1Y^7 - 25200X^5Y^1 - 50400X^3Y^3 - 25200X^1Y^5 + 5040X^3Y^1 + 5040X^1Y^3 - 336X^1Y^1] \\
\frac{\delta Z_{13}^3}{\delta y} &= \sqrt{28}[5148X^{11}Y^1 - 25740X^9Y^3 - 154440X^7Y^5 - 257400X^5Y^7 - 180180X^3Y^9 - 46332X^1Y^{11} - 7920X^9Y^1 + 95040X^7Y^3 + 332640X^5Y^5 + 348480X^3Y^7 + 118800X^1Y^9 - 110880X^5Y^3 - 221760X^3Y^5 - 110880X^1Y^7 + 5040X^5Y^1 + 50400X^3Y^3 + 45360X^1Y^5 - 2520X^3Y^1 - 7560X^1Y^3 + 336X^1Y^1] \\
\frac{\delta Z_{13}^5}{\delta y} &= \sqrt{28}[8580X^{11}Y^1 - 82940X^9Y^3 - 154440X^7Y^5 - 51480X^5Y^7 + 71500X^3Y^9 + 42900X^1Y^{11} + 27720X^9Y^1 + 174240X^7Y^3 + 166320X^5Y^5 - 79200X^3Y^7 - 99000X^1Y^9 - 31680X^7Y^1 - 110880X^5Y^3 + 79200X^1Y^7 + 15120X^5Y^1 + 16800X^3Y^3 - 25200X^1Y^5 - 2520X^3Y^1 + 2520X^1Y^3] \\
\frac{\delta Z_{13}^7}{\delta y} &= \sqrt{28}[10296X^{11}Y^1 - 28600X^9Y^3 + 61776X^7Y^5 + 144144X^5Y^7 + 40040X^3Y^9 - 24024X^1Y^{11} + 25080X^9Y^1 + 15840X^7Y^3 - 166320X^5Y^5 - 110880X^3Y^7 + 46200X^1Y^9 - 19800X^7Y^1 + 27720X^5Y^3 + 83160X^3Y^5 - 27720X^1Y^7 + 5040X^5Y^1 - 16800X^3Y^3 + 5040X^1Y^5] \\
\frac{\delta Z_{13}^9}{\delta y} &= \sqrt{28}[5304X^{11}Y^1 + 17160X^9Y^3 + 61776X^7Y^5 - 20592X^5Y^7 - 51480X^3Y^9 + 8424X^1Y^{11} + 9240X^9Y^1 - 47520X^7Y^3 - 33264X^5Y^5 + 79200X^3Y^7 - 11880X^1Y^9 - 3960X^7Y^1 + 27720X^5Y^3 - 27720X^3Y^5 + 3960X^1Y^7] \\
\frac{\delta Z_{13}^{11}}{\delta y} &= \sqrt{28}[1404X^{11}Y^1 + 14300X^9Y^3 - 10296X^7Y^5 - 30888X^5Y^7 + 20020X^3Y^9 - 1716X^1Y^{11} + 1320X^9Y^1 - 15840X^7Y^3 + 33264X^5Y^5 - 15840X^3Y^7 + 1320X^1Y^9] \\
\frac{\delta Z_{13}^{13}}{\delta y} &= \sqrt{28}[156X^{11}Y^1 + 2860X^9Y^3 - 10296X^7Y^5 + 10296X^5Y^7 - 2860X^3Y^9 + 156X^1Y^{11}] \\
\frac{\delta Z_{14}^{-14}}{\delta y} &= \sqrt{30}[14X^{13} - 1092X^{11}Y^2 + 10010X^9Y^4 - 24024X^7Y^6 + 18018X^5Y^8 - 4004X^3Y^{10} + 182X^1Y^{12}] \\
\frac{\delta Z_{14}^{-12}}{\delta y} &= \sqrt{30}[168X^{13} - 8736X^{11}Y^2 + 40040X^9Y^4 - 72072X^5Y^8 + 32032X^3Y^{10} - 2184X^1Y^{12} - 156X^{11} + 8580X^9Y^2 - 51480X^7Y^4 + 72072X^5Y^6 - 25740X^3Y^8 + 1716X^1Y^{10}] \\
\frac{\delta Z_{14}^{-10}}{\delta y} &= \sqrt{30}[910X^{13} - 27300X^{11}Y^2 + 10010X^9Y^4 + 168168X^7Y^6 + 18018X^5Y^8 - 100100X^3Y^{10} + 11830X^1Y^{12} - 1560X^{11} + 51480X^9Y^2 - 102960X^7Y^4 - 144144X^5Y^6 + 154440X^3Y^8 - 17160X^1Y^{10} + 660X^9 - 23760X^7Y^2 + 83160X^5Y^4 - 55440X^3Y^6 + 5940X^1Y^8] \\
\frac{\delta Z_{14}^{-8}}{\delta y} &= \sqrt{30}[2912X^{13} - 34944X^{11}Y^2 - 160160X^9Y^4 + 288288X^5Y^8 + 128128X^3Y^{10} - 37856X^1Y^{12} - 6864X^{11} + 102960X^9Y^2 + 205920X^7Y^4 - 288288X^5Y^6 - 308880X^3Y^8 + 75504X^1Y^{10} + 5280X^9 - 95040X^7Y^2 + 221760X^3Y^6 - 47520X^1Y^8 - 1320X^7 + 27720X^5Y^2 - 46200X^3Y^4 + 9240X^1Y^6] \\
\frac{\delta Z_{14}^{-6}}{\delta y} &= \sqrt{30}[6006X^{13} + 12012X^{11}Y^2 - 190190X^9Y^4 - 504504X^7Y^6 - 342342X^5Y^8 + 44044X^3Y^{10} + 78078X^1Y^{12} - 17160X^{11} + 17160X^9Y^2 + 514800X^7Y^4 + 720720X^5Y^6 + 51480X^3Y^8 - 188760X^1Y^{10} + 17820X^9 - 71280X^7Y^2 - 415800X^5Y^4 - 166320X^3Y^6 + 160380X^1Y^8 - 7920X^7 + 55440X^5Y^2 + 92400X^3Y^4 - 55440X^1Y^6 + 1260X^5 - 12600X^3Y^2 + 6300X^1Y^4] \\
\frac{\delta Z_{14}^{-4}}{\delta y} &= \sqrt{30}[8008X^{13} + 96096X^{11}Y^2 + 200200X^9Y^4 - 360360X^5Y^8 - 352352X^3Y^{10} - 104104X^1Y^{12} - 25740X^{11} - 231660X^9Y^2 - 257400X^7Y^4 + 360360X^5Y^6 + 694980X^3Y^8 + 283140X^1Y^{10} + 31680X^9 + 190080X^7Y^2 - 443520X^3Y^6 - 285120X^1Y^8 - 18480X^7 - 55440X^5Y^2 + 92400X^3Y^4 + 129360X^1Y^6 + 5040X^5 - 25200X^1Y^4 - 504X^3 + 1512X^1Y^2] \\
\frac{\delta Z_{14}^{-2}}{\delta y} &= \sqrt{30}[6006X^{13} + 108108X^{11}Y^2 + 450450X^9Y^4 + 840840X^7Y^6 + 810810X^5Y^8 + 396396X^3Y^{10} + 78078X^1Y^{12} - 20592X^{11} - 308880X^9Y^2 - 1029600X^7Y^4 - 1441440X^5Y^6 - 926640X^3Y^8 - 226512X^1Y^{10} + 27720X^9 + 332640X^7Y^2 + 831600X^5Y^4 + 776160X^3Y^6 + 249480X^1Y^8 - 18480X^7 - 166320X^5Y^2 - 277200X^3Y^4 - 129360X^1Y^6 + 6300X^5 + 37800X^3Y^2 + 31500X^1Y^4 - 1008X^3 - 3024X^1Y^2 + 56X^1] \\
\frac{\delta Z_{14}^0}{\delta y} &= \sqrt{15}[48048X^{12}Y^1 + 288288X^{10}Y^3 + 720720X^8Y^5 + 960960X^6Y^7 + 720720X^4Y^9 + 288288X^2Y^{11} + 48048Y^{13} - 144144X^{10}Y^1 - 720720X^8Y^3 - 1441440X^6Y^5 - 1441440X^4Y^7 - 720720X^2Y^9 - 144144Y^{11} + 166320X^8Y^1 + 665280X^6Y^3 + 997920X^4Y^5 + 665280X^2Y^7 + 166320Y^9 - 92400X^6Y^1 - 277200X^4Y^3 - 277200X^2Y^5 - 92400Y^7 + 25200X^4Y^1 + 50400X^2Y^3 + 25200Y^5 - 3024X^2Y^1 - 3024Y^3 + 112Y^1] \\
\frac{\delta Z_{14}^2}{\delta y} &= \sqrt{30}[30030X^{12}Y^1 + 108108X^{10}Y^3 + 90090X^8Y^5 - 120120X^6Y^7 - 270270X^4Y^9 - 180180X^2Y^{11} - 42042Y^{13} - 82368X^{10}Y^1 - 205920X^8Y^3 + 411840X^4Y^7 + 411840X^2Y^9 + 123552Y^{11} + 83160X^8Y^1 + 110880X^6Y^3 - 166320X^4Y^5 - 332640X^2Y^7 - 138600Y^9 - 36960X^6Y^1 + 110880X^2Y^5 + 73920Y^7 + 6300X^4Y^1 - 12600X^2Y^3 - 18900Y^5 + 2016Y^3 - 56Y^1] \\
\frac{\delta Z_{14}^4}{\delta y} &= \sqrt{30}[4004X^{12}Y^1 - 152152X^{10}Y^3 - 540540X^8Y^5 - 720720X^6Y^7 - 380380X^4Y^9 - 24024X^2Y^{11} + 28028Y^{13} + 25740X^{10}Y^1 + 437580X^8Y^3 + 1081080X^6Y^5 + 875160X^4Y^7 +
\end{aligned}$$

$$128700X^2Y^9 - 77220Y^{11} - 47520X^8Y^1 - 443520X^6Y^3 - 665280X^4Y^5 - 190080X^2Y^7 + 79200Y^9 + 36960X^6Y^1 + 184800X^4Y^3 + 110880X^2Y^5 - 36960Y^7 - 12600X^4Y^1 - 25200X^2Y^3 + 7560Y^5 + 1512X^2Y^1 - 504Y^3]$$

$$\frac{\delta Z_{14}^6}{\delta y} = \sqrt{30}[22022X^{12}Y^1 - 156156X^{10}Y^3 - 162162X^8Y^5 + 216216X^6Y^7 + 390390X^4Y^9 + 132132X^2Y^{11} - 14014Y^{13} + 68640X^{10}Y^1 + 308880X^8Y^3 - 617760X^4Y^7 - 343200X^2Y^9 + 34320Y^{11} - 77220X^8Y^1 - 166320X^6Y^3 + 249480X^4Y^5 + 308880X^2Y^7 - 29700Y^9 + 36960X^6Y^1 - 110880X^2Y^5 + 10560Y^7 - 6300X^4Y^1 + 12600X^2Y^3 - 1260Y^5]$$

$$\frac{\delta Z_{14}^8}{\delta y} = \sqrt{30}[18200X^{12}Y^1 - 16016X^{10}Y^3 + 216216X^8Y^5 + 288288X^6Y^7 - 40040X^4Y^9 - 109200X^2Y^{11} + 5096Y^{13} + 44616X^{10}Y^1 - 51480X^8Y^3 - 432432X^6Y^5 - 102960X^4Y^7 + 223080X^2Y^9 - 10296Y^{11} - 35640X^8Y^1 + 110880X^6Y^3 + 166320X^4Y^5 - 142560X^2Y^7 + 6600Y^9 + 9240X^6Y^1 - 46200X^4Y^3 + 27720X^2Y^5 - 1320Y^7]$$

$$\frac{\delta Z_{14}^{10}}{\delta y} = \sqrt{30}[7826X^{12}Y^1 + 44044X^{10}Y^3 + 90090X^8Y^5 - 120120X^6Y^7 - 110110X^4Y^9 + 46956X^2Y^{11} - 1274Y^{13} + 13728X^{10}Y^1 - 102960X^8Y^3 + 205920X^4Y^7 - 68640X^2Y^9 + 1872Y^{11} - 5940X^8Y^1 + 55440X^6Y^3 - 83160X^4Y^5 + 23760X^2Y^7 - 660Y^9]$$

$$\frac{\delta Z_{14}^{12}}{\delta y} = \sqrt{30}[1820X^{12}Y^1 + 24024X^{10}Y^3 - 36036X^8Y^5 - 48048X^6Y^7 + 60060X^4Y^9 - 10920X^2Y^{11} + 196Y^{13} + 1716X^{10}Y^1 - 25740X^8Y^3 + 72072X^6Y^5 - 51480X^4Y^7 + 8580X^2Y^9 - 156Y^{11}]$$

$$\frac{\delta Z_{14}^{14}}{\delta y} = \sqrt{30}[182X^{12}Y^1 + 4004X^{10}Y^3 - 18018X^8Y^5 + 24024X^6Y^7 - 10010X^4Y^9 + 1092X^2Y^{11} - 14Y^{13}]$$

$$\frac{\delta Z_{15}^{-15}}{\delta y} = \sqrt{32}[15X^{14} - 1365X^{12}Y^2 + 15015X^{10}Y^4 - 45045X^8Y^6 + 45045X^6Y^8 - 15015X^4Y^{10} + 1365X^2Y^{12} - 15Y^{14}]$$

$$\frac{\delta Z_{15}^{-13}}{\delta y} = \sqrt{32}[195X^{14} - 12285X^{12}Y^2 + 75075X^{10}Y^4 - 45045X^8Y^6 - 135135X^6Y^8 + 105105X^4Y^{10} - 15015X^2Y^{12} + 225Y^{14} - 182X^{12} + 12012X^{10}Y^2 - 90090X^8Y^4 + 168168X^6Y^6 - 90090X^4Y^8 + 12012X^2Y^{10} - 182Y^{12}]$$

$$\frac{\delta Z_{15}^{-11}}{\delta y} = \sqrt{32}[1155X^{14} - 45045X^{12}Y^2 + 75075X^{10}Y^4 + 315315X^8Y^6 - 135135X^6Y^8 - 255255X^4Y^{10} + 72345X^2Y^{12} - 1575Y^{14} - 2002X^{12} + 84084X^{10}Y^2 - 270270X^8Y^4 - 168168X^6Y^6 + 450450X^4Y^8 - 108108X^2Y^{10} + 2366Y^{12} + 858X^{10} - 38610X^8Y^2 + 180180X^6Y^4 - 180180X^4Y^6 + 38610X^2Y^8 - 858Y^{10}]$$

$$\frac{\delta Z_{15}^{-9}}{\delta y} = \sqrt{32}[4095X^{14} - 77805X^{12}Y^2 - 225225X^{10}Y^4 + 315315X^8Y^6 + 765765X^6Y^8 + 105105X^4Y^{10} - 195195X^2Y^{12} + 6825Y^{14} - 9828X^{12} + 216216X^{10}Y^2 + 180180X^8Y^4 - 1009008X^6Y^6 - 540540X^4Y^8 + 408408X^2Y^{10} - 14196Y^{12} + 7722X^{10} - 193050X^8Y^2 + 180180X^6Y^4 + 540540X^4Y^6 - 270270X^2Y^8 + 9438Y^{10} - 1980X^8 + 55440X^6Y^2 - 138600X^4Y^4 + 55440X^2Y^6 - 1980Y^8]$$

$$\frac{\delta Z_{15}^{-7}}{\delta y} = \sqrt{32}[9555X^{14} - 28665X^{12}Y^2 - 525525X^{10}Y^4 - 945945X^8Y^6 - 135135X^6Y^8 + 645645X^4Y^{10} + 301665X^2Y^{12} - 20475Y^{14} - 28028X^{12} + 168168X^{10}Y^2 + 1261260X^8Y^4 + 1009008X^6Y^6 - 900900X^4Y^8 - 792792X^2Y^{10} + 52052Y^{12} + 30030X^{10} - 270270X^8Y^2 - 900900X^6Y^4 + 180180X^4Y^6 + 733590X^2Y^8 - 47190Y^{10} - 13860X^8 + 166320X^6Y^2 + 138600X^4Y^4 - 277200X^2Y^6 + 17820Y^8 + 2310X^6 - 34650X^4Y^2 + 34650X^2Y^4 - 2310Y^6]$$

$$\frac{\delta Z_{15}^{-5}}{\delta y} = \sqrt{32}[15015X^{14} + 135135X^{12}Y^2 + 15015X^{10}Y^4 - 945945X^8Y^6 - 175675X^6Y^8 - 1156155X^4Y^{10} - 195195X^2Y^{12} + 45045Y^{14} - 50050X^{12} - 300300X^{10}Y^2 + 450450X^8Y^4 + 2522520X^6Y^6 + 2612610X^4Y^8 + 660660X^2Y^{10} - 130130Y^{12} + 64350X^{10} + 193050X^8Y^2 - 900900X^6Y^4 - 1981980X^4Y^6 - 810810X^2Y^8 + 141570Y^{10} - 39600X^8 + 554400X^4Y^4 + 443520X^2Y^6 - 71280Y^8 + 11550X^6 - 34650X^4Y^2 - 103950X^2Y^4 + 16170Y^6 - 1260X^4 + 7560X^2Y^2 - 1260Y^4]$$

$$\frac{\delta Z_{15}^{-3}}{\delta y} = \sqrt{32}[15015X^{14} + 255255X^{12}Y^2 + 975975X^{10}Y^4 + 1576575X^8Y^6 + 1126125X^6Y^8 + 165165X^4Y^{10} - 195195X^2Y^{12} - 75075Y^{14} - 54054X^{12} - 756756X^{10}Y^2 - 2252250X^8Y^4 - 2522520X^6Y^6 - 810810X^4Y^8 + 396396X^2Y^{10} + 234234Y^{12} + 77220X^{10} + 849420X^8Y^2 + 1801800X^6Y^4 + 1081080X^4Y^6 - 231660X^2Y^8 - 283140Y^{10} - 55440X^8 - 443520X^6Y^2 - 554400X^4Y^4 + 166320Y^8 + 20790X^6 + 103950X^4Y^2 + 34650X^2Y^4 - 48510Y^6 - 3780X^4 - 7560X^2Y^2 + 6300Y^4 + 252X^2 - 252Y^2]$$

$$\frac{\delta Z_{15}^{-1}}{\delta y} = \sqrt{32}[6435X^{14} + 135135X^{12}Y^2 + 675675X^{10}Y^4 + 1576575X^8Y^6 + 2027025X^6Y^8 + 1486485X^4Y^{10} + 585585X^2Y^{12} + 96525Y^{14} - 24024X^{12} - 432432X^{10}Y^2 - 1801800X^8Y^4 - 3363360X^6Y^6 - 3243240X^4Y^8 - 1585584X^2Y^{10} - 312312Y^{12} + 36036X^{10} + 540540X^8Y^2 + 1801800X^6Y^4 + 2522520X^4Y^6 + 1621620X^2Y^8 + 396396Y^{10} - 27720X^8 - 332640X^6Y^2 - 831600X^4Y^4 - 776160X^2Y^6 - 249480Y^8 + 11550X^6 + 103950X^4Y^2 + 173250X^2Y^4 + 80850Y^6 - 2520X^4 - 15120X^2Y^2 - 12600Y^4 + 252X^2 + 756Y^2 - 8]$$

$$\frac{\delta Z_{15}^1}{\delta y} = \sqrt{32}[90090X^{13}Y^1 + 540540X^{11}Y^3 + 1351350X^9Y^5 + 1801800X^7Y^7 + 1351350X^5Y^9 + 540540X^3Y^{11} + 90090X^1Y^{13} - 288288X^{11}Y^1 - 1441440X^9Y^3 - 2882880X^7Y^5 - 2882880X^5Y^7 - 1441440X^3Y^9 - 288288X^1Y^{11} + 360360X^9Y^1 + 1441440X^7Y^3 + 2162160X^5Y^5 + 1441440X^3Y^7 + 360360X^1Y^9 - 221760X^7Y^1 - 665280X^5Y^3 - 665280X^3Y^5 - 221760X^1Y^7 + 69300X^5Y^1 + 138600X^3Y^3 + 69300X^1Y^5 - 10080X^3Y^1 - 10080X^1Y^3 + 504X^1Y^1]$$

$$\frac{\delta Z_{15}^3}{\delta y} = \sqrt{32}[30030X^{13}Y^1 - 60060X^{11}Y^3 - 750750X^9Y^5 - 1801800X^7Y^7 - 1951950X^5Y^9 - 1021020X^3Y^{11} - 210210X^1Y^{13} - 72072X^{11}Y^1 + 360360X^9Y^3 + 2162160X^7Y^5 + 3603600X^5Y^7 + 2522520X^3Y^9 + 648648X^1Y^{11} + 51480X^9Y^1 - 617760X^7Y^3 - 2162160X^5Y^5 - 2265120X^3Y^7 - 772200X^1Y^9 + 443520X^5Y^3 + 887040X^3Y^5 + 443520X^1Y^7 - 13860X^5Y^1 - 138600X^3Y^3 - 124740X^1Y^5 + 5040X^3Y^1 + 15120X^1Y^3 - 504X^1Y^1]$$

$$\frac{\delta Z_{15}^5}{\delta y} = \sqrt{32}[30030X^{13}Y^1 - 420420X^{11}Y^3 - 1171170X^9Y^5 - 1081080X^7Y^7 + 30030X^5Y^9 + 540540X^3Y^{11} + 210210X^1Y^{13} + 120120X^{11}Y^1 + 1161160X^9Y^3 + 2162160X^7Y^5 + 720720X^5Y^7 - 1001000X^3Y^9 - 600600X^1Y^{11} - 180180X^9Y^1 - 1132560X^7Y^3 - 1081080X^5Y^5 + 514800X^3Y^7 + 643500X^1Y^9 + 126720X^7Y^1 + 443520X^5Y^3 - 316800X^1Y^7 - 41580X^5Y^1 - 46200X^3Y^3 + 69300X^1Y^5 + 5040X^3Y^1 - 5040X^1Y^3]$$

$$\frac{\delta Z_{15}^7}{\delta y} = \sqrt{32}[46410X^{13}Y^1 - 234780X^{11}Y^3 + 90090X^9Y^5 + 1081080X^7Y^7 + 1051050X^5Y^9 + 114660X^3Y^{11} - 133770X^1Y^{13} + 144144X^{11}Y^1 + 400400X^9Y^3 - 864864X^7Y^5 - 2018016X^5Y^7 - 560560X^3Y^9 + 336336X^1Y^{11} - 163020X^9Y^1 - 102960X^7Y^3 + 1081080X^5Y^5 + 720720X^3Y^7 - 300300X^1Y^9 + 79200X^7Y^1 - 110880X^5Y^3 - 332640X^3Y^5 + 110880X^1Y^7 - 13860X^5Y^1 + 46200X^3Y^3 - 13860X^1Y^5]$$

$$\frac{\delta Z_{15}^9}{\delta y} = \sqrt{32}[30030X^{13}Y^1 + 38220X^{11}Y^3 + 510510X^9Y^5 + 360360X^7Y^7 - 450450X^5Y^9 - 311220X^3Y^{11} + 57330X^1Y^{13} + 74256X^{11}Y^1 - 240240X^9Y^3 - 864864X^7Y^5 + 288288X^5Y^7 + 720720X^3Y^9 - 117936X^1Y^{11} - 60060X^9Y^1 + 308880X^7Y^3 + 216216X^5Y^5 - 514800X^3Y^7 + 77220X^1Y^9 + 15840X^7Y^1 - 110880X^5Y^3 + 110880X^3Y^5 - 15840X^1Y^7]$$

$$\frac{\delta Z_{15}^{11}}{\delta y} = \sqrt{32}[11130X^{13}Y^1 + 92820X^{11}Y^3 + 90090X^9Y^5 - 360360X^7Y^7 - 150150X^5Y^9 + 180180X^3Y^{11} - 16170X^1Y^{13} + 19656X^{11}Y^1 - 200200X^9Y^3 + 144144X^7Y^5 + 432432X^5Y^7 - 280280X^3Y^9 + 24024X^1Y^{11} - 8580X^9Y^1 + 102960X^7Y^3 - 216216X^5Y^5 + 102960X^3Y^7 - 8580X^1Y^9]$$

$$\frac{\delta Z_{15}^{13}}{\delta y} = \sqrt{32}[2310X^{13}Y^1 + 38220X^{11}Y^3 - 90090X^9Y^5 - 51480X^7Y^7 + 150150X^5Y^9 - 49140X^3Y^{11} + 2730X^1Y^{13} + 2184X^{11}Y^1 - 40040X^9Y^3 + 144144X^7Y^5 - 144144X^5Y^7 + 40040X^3Y^9 - 2184X^1Y^{11}]$$

$$\frac{\delta Z_{15}^{15}}{\delta y} = \sqrt{32}[210X^{13}Y^1 + 5460X^{11}Y^3 - 30030X^9Y^5 + 51480X^7Y^7 - 30030X^5Y^9 + 5460X^3Y^{11} - 210X^1Y^{13}]$$