

$$\begin{array}{r} \infty \\ \hline 56x^{14} + 20x^8 + 126x^7 + 56x^6 + 45x + 20 \\ 64x^{14} + \quad \quad \quad 178x^7 + \quad \quad \quad 45 + \\ \hline 120x^{14} + 20x^8 + 304x^7 + 56x^6 + 45x + 65 \end{array}$$

$$\begin{aligned} y' &= 7(32x^7 + 9)^6 (2x^7 + 5x)^5 + (4x^8 + 9x + 4)^7 \cdot 5(14x^6 + 5)^4 \\ &= 13 \left((64x^{14} + 178x^7 + 45)'' + (56x^{14} + 20x^8 + 126x^7 + 56x^6 + 45x + 20)'' \right) \\ &= 13 (120x^{14} + 20x^8 + 304x^7 + 56x^6 + 45x + 65)'' \end{aligned}$$

$$5). y = \sqrt[5]{(4x^8 + 9x - 4)}$$

$$= (4x^8 + 9x - 4)^{-\frac{1}{5}}$$

$$y' = -\frac{1}{5} (4x^8 + 9x - 4)^{-\frac{1}{5}} \cdot (12x^7 + 9)$$

$$= \frac{12x^7 + 9}{5 + \sqrt[5]{(4x^8 + 9x - 4)}} //$$

$$6). y = e^{(4 - 2x^7)}$$

$$y' = e^{(4 - 2x^7)} \cdot (-14x^6)$$

$$= -14x^6 \cdot e^{(4 - 2x^7)} //$$

$$\therefore \frac{56x^{14} + 20x^8 + 126x^7 + 56x^6 + 45x + 20}{64x^{14} + 178x^7 + 45} + \frac{178x^7 + 45}{120x^{14} + 20x^8 + 304x^7 + 56x^6 + 45x + 65}$$

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$$= \frac{12x^7 + 9}{5 + \sqrt[5]{(4x^8 + 9x - 4)}} //$$

$$6). Y = \ell(4 - 2x^7)$$

$$Y' = \ell^{(4 - 2x^7)} \cdot (-14x^6)$$

$$= -14x^6 \cdot \ell^{(4 - 2x^7)} //$$