

Διαίρεση Μονωνύμων

$$\bullet (8x^{21}) : (2x^{10}) = \frac{8}{2} x^{21-10} \\ = 4x^{11}$$

$$\bullet (-9x^3) : (3x^2) \\ = \frac{-9}{3} x^{3-2} = -\frac{9}{3} x^1 = -3x$$

$$\bullet (2x^7) : (x^3)$$

$$= \frac{2}{1} x^{7-3} = 2x^4$$

$$\frac{+}{+} = +$$

$$\frac{-}{-} = +$$

$$\frac{+}{-} = -$$

$$\frac{-}{+} = -$$

$$-\frac{a}{b} = \frac{-a}{b} = \frac{a}{-b}$$

$$-\frac{3}{5} = \frac{-3}{5} = \frac{3}{-5}$$

$$\begin{aligned} \bullet (-x^{10}) : (x^9) &= \frac{-1}{1} x^{10-9} \\ &= -1 x^1 = -x \end{aligned}$$

$$\bullet (-2z^3) : (-1z) = \frac{-2}{-1} z^{3-1} = 2z^2$$

$$\left(\frac{+}{-} = + \right)$$

$$\begin{aligned} \bullet (-2^4 z^{10}) : (8z^5) &= (-16 z^{10}) : (8z^5) \\ &= \frac{-16}{8} z^{10-5} = -2z^5 \end{aligned}$$

$$\begin{aligned} \bullet (100z^{50}) : (2^3 z^2) &= \frac{100}{2^3} z^{50-2} \\ &= \frac{100}{8} z^{48} = \frac{25}{2} z^{48} \end{aligned}$$

$$\bullet \left(-\frac{3}{2} x^{100} \right) : \left(2 x^{20} \right)$$

$$= \frac{-\frac{3}{2}}{2} x^{100-20} = \frac{-\frac{3}{2}}{\frac{2}{1}} x^{80} = \frac{(-3) \cdot 1}{2 \cdot 2} x^{80} \\ = -\frac{3}{4} x^{80}$$

$$\bullet \left(2 x^9 \right) : \left(\frac{1}{5} x^1 \right) = \frac{2}{\frac{1}{5}} x^{9-1} = \frac{2}{\frac{1}{5}} x^8 \\ = \frac{2 \cdot 5}{1 \cdot 1} x^8 = \frac{10}{1} x^8 = 10 x^8$$

$$\bullet \left(\frac{1}{5} x^{21} \right) : \left(\frac{1}{3} x^7 \right)$$

$$= \frac{\frac{1}{5}}{\frac{1}{3}} x^{21-7} = \frac{1 \cdot 3}{5 \cdot 1} x^{14} = \frac{3}{5} x^{14}$$

$$\left(\frac{(-1)^3}{3} x^{37} \right) : \left(\frac{(-1)^4}{4} x^{36} \right)$$

$$= \left(-\frac{1}{3} x^{37} \right) : \left(\frac{1}{4} x^{36} \right)$$

$$= \frac{-\frac{1}{3}}{\frac{1}{4}} x^{37-36} = \frac{(-1) \cdot 4}{3 \cdot 1} x^1 = -\frac{4}{3} x$$

$$= -\frac{4}{3} x$$

$$\bullet (2z)^2 : (3z)$$

$$= (2^2 z^{1 \cdot 2}) : (3z)$$

$$= (4z^2) : (3z) = \frac{4}{3} z^{2-1} = \frac{4}{3} z$$

$$\begin{aligned}
 & \cdot (3j^{10}) : (3j^3)^3 \\
 &= (3j^{10}) : (3^3 j^{3 \cdot 3}) \\
 &= (3j^{10}) : (27 j^9)
 \end{aligned}$$

$$\cdot \left(\left(\frac{2}{3} \right)^2 j^{2023} \right) : \left(\left(\frac{2}{5} \right)^3 j^{10} \right)$$

$$= \left(\frac{2^2}{3^2} j^{2023} \right) : \left(\frac{2^3}{5^3} j^{10} \right)$$

$$= \left(\frac{4}{9} j^{2023} \right) : \left(\frac{8}{125} j^{10} \right) \quad \longrightarrow$$

$$\frac{\frac{4}{9}}{\frac{8}{125}} \quad \int^{2023-10}$$

$$= \frac{\cancel{4} \cdot 125}{9 \cdot \cancel{8} 2} \quad \int^{2013}$$

$$= \frac{125}{9 \cdot 2} \quad \int^{2013}$$

$$= \frac{125}{18} \quad \int^{2013}$$