

Practice

$$x \cdot x \cdot x \cdot x = x^4$$

$$x + x + x + x = 4x$$

not the same!

$$\frac{x^4 y^5}{x^2 y^3} =$$

Quotient rule

$$x^{4-2} y^{5-3} = x^2 y^2$$

$$x^0 \cdot y^0 = | \cdot | = 1$$

Zero exponent ✓

10-9

$$2x^3 y^3 \cdot 2x^{-1} y^3$$

negative exponent

$$2x^3 \frac{1}{y^3} \cdot 2 \frac{1}{x^1} y^3$$

$$\frac{2x^3}{y^3} \cdot \frac{2y^3}{x} = \frac{4x^3 y^3}{x^1 y^3} = 4x^{3-1} y^{3-3} = 4x^2 y^0 = 4x^2$$

$$\frac{60x^3}{12x^1} = 5x^3 - x^1 = 5x^2$$

$$(2x^2)^{-4} = 2^{1 \cdot -4} x^{2 \cdot -4} = 2^{-4} x^{-8} = \frac{1}{2^4 x^8} = \frac{1}{16x^8}$$

$(-1)^2 \leftarrow$ even

$(-1)^3 \leftarrow$ odd

① answer always positive

② answer always negative