

Review these examples concerning exponents.

Multiplying Like Bases

$$(x^2)(x^3) = x^5$$

Dividing Like Bases

$$\frac{x^6}{x^2} = x^4$$

Power to a Power

$$(x^4)^2 = x^8$$

Use the examples above to simplify the problems below.

9) $(y^4)(y^5)$ 10) $(3d^5)(7d^6)$

11) $(5g^2f)(-4g^4) \cdot gf^2$ 12)

$$\frac{k^{12}}{k^4}$$

13) $\frac{h^2}{h^9}$ 14)

$$(a^3)^4$$

15) $(z^2v^3)^5$

16) Use the “multiplying of like bases” property to explain why the “power to a power” property works.