

APRIL 10, 2012 ^{ALGI}
GET OUT YOUR REVIEW FROM TUESDAY



4/12 - Exponent Rules: Product of Powers

What are exponents?

$$\begin{array}{l} 2^4 \leftarrow \text{exponent} \\ \quad \leftarrow \text{base} \\ = 2 \cdot 2 \cdot 2 \cdot 2 \\ = 16 \end{array}$$

Exponent tells how many times the base is multiplied by itself.

$$\begin{array}{l} x^2 \\ = x \cdot x \end{array}$$

$$\begin{array}{l} 2x^4 \\ = 2 \cdot x \cdot x \cdot x \cdot x \end{array}$$

$$\begin{array}{l} x^2 \cdot 2x^4 \\ = x \cdot x \cdot 2 \cdot x \cdot x \cdot x \cdot x \\ = 2x^6 \end{array}$$

$$2r^2 \cdot 2r^3 \\ = 4r^5$$

$$3m^4 \cdot 2m^3 \\ = 6m^7$$

$$\overset{\vee}{3v} \cdot \overset{\vee\vee\vee\vee}{2v^4} \\ = 6v^5$$

$$1a^2 \cdot 3a^3 \cdot 1a^2 \\ = 3a^7$$

$$\begin{aligned} & -2k^3 \cdot -\cancel{k} \\ & \quad 2k^4 \end{aligned}$$

$$\begin{aligned} & 2r^4 \cdot -2r^3 \\ & = -4r^7 \end{aligned}$$

$$\begin{aligned} & 3x^3 \cdot -4x^3 \\ & = -12x^6 \end{aligned}$$

$$\begin{aligned} & -x^4 \cdot 2x^4 \cdot x \\ & = -2x^9 \end{aligned}$$

$$1xy^4 \cdot 4y^4 \\ = 4xy^8$$

$$2mn^4 \cdot -4n^3 \\ = -8mn^7$$

$$xy^2 \cdot 4y^2 \cdot y \\ = 4xy^5$$

$$-2a \cdot -3ba^2 \\ = 6a^3b$$

$$\begin{aligned} & -4yx^{\overset{xxx}{3}} \cdot -4x^{\overset{x}{1}}y^4 \\ & = 16x^4y^5 \end{aligned}$$

$$\begin{aligned} & -u^3v^4 \cdot 4u^3v^3 \\ & = -4u^6v^7 \end{aligned}$$

$$\begin{aligned} & -3x^4y^4 \cdot 3x^2y^3 \\ & = -9x^6y^7 \end{aligned}$$

Questions??

HOMework

Pink EXPONENTS WS1

DUE TODAY