Alg1

April 19, 2012

4/19 - Dividing with Exponents

Exponents tell you multiply the base by itself what the exponent is immediately behind

$$\frac{2m^2}{2m^3} = \frac{2 \cdot m \cdot m}{2 \cdot m \cdot m \cdot m} = \frac{1}{m}$$

$$\frac{2x^4}{4x^3}$$

$$= \frac{1 \cdot 2 \cdot x \cdot x \cdot x \cdot x}{2 \cdot 2 \cdot x \cdot x \cdot x}$$

$$= \frac{1x}{2}$$

$$\frac{2n}{n^4}$$

$$= \frac{2 \cdot n}{n \cdot n \cdot n \cdot n}$$

$$= \frac{2}{n^3}$$

$$\frac{2x^3}{x}$$

$$= \frac{2x^2}{1}$$

$$= 2x^2$$

$$\frac{+3x^3}{+x}$$

$$= 3x^2$$

$$\frac{6k}{-3k^3}$$

$$= \frac{2}{-1k^2}$$

$$= \frac{2}{-k^2}$$

$$\frac{-2}{k^2} \text{ or } -\frac{2}{k^2}$$

$$\frac{6x^3}{4x^6}$$

$$= \frac{3}{2x^3}$$

$$\frac{m^3 n^2}{m^4 n^4}$$

$$= \frac{m\,m\,m\;n\,n}{m\,m\,m\,m\,n\,n\,n\,n}$$

$$= \frac{1}{m\,n^2}$$

$$\frac{4yx^4}{4xy}$$

$$= x^3$$

$$\frac{3m^4n^2}{2mn^3}$$

$$= \frac{3m^3}{2n}$$

$$-\frac{b a^3}{4b a^4}$$

$$= -\frac{1}{4a}$$

$$-\frac{3m^3n^3}{2mn^3}$$

$$= \frac{-3m^2}{2}$$

$$\frac{-2x^3y^4}{-3x^2}$$

$$= \frac{2xy^4}{3}$$

Homework

Gold Exponents W85

Due Friday