**X0=\_\_\_ 10000=\_\_\_**

Anything raised to the zero power is equal to

**(x45y300z89)0=\_\_\_\_**

**Negative Exponents**

To turn a \_\_\_\_\_\_\_\_ exponent

into a \_\_\_\_\_\_\_\_\_\_ exponent,

\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_ and

Change the \_\_\_\_\_\_\_\_\_\_ of

the EXPONENT

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

$$\frac{x^{6}}{y^{-8}} =\frac{ }{ }$$

 **Power to a Power**

 (*x*2)3=

 **Multiply**

 *x*2 \* *x*3=

 **Add**

When \_\_\_\_\_\_\_\_\_\_ powers with like bases, treat the division bar like a giant \_\_\_\_\_\_\_\_\_\_\_\_ sign

$\frac{x^{9}}{x^{3}} $= *x* = *x*

**Remember: You may only use these exponent rules with like bases.**

**Part of a Power**

**23**= \_\_\_\_\_\*\_\_\_\_\_\*\_\_\_\_\_

The \_\_\_\_\_\_\_\_\_ tell us how many

\_\_\_\_\_\_\_\_\_ the \_\_\_\_\_\_\_\_\_ is being

 \_\_\_\_\_\_\_\_\_\_\_ together

**2 = 21**

If a \_\_\_\_\_\_\_\_\_ or \_\_\_\_\_\_\_\_\_\_

does NOT have a written \_\_\_\_\_\_\_\_\_\_\_\_ it is automatically and exponent

of \_\_\_\_\_\_\_\_

xy2z = \_\_\_\_\_\_\*\_\_\_\_\_\*\_\_\_\_\_

**Example F**

$$\frac{9x^{5}y^{-8}z^{2}}{12x^{3}y^{-2}z^{2}}$$

**Example E**

$$\frac{xy^{9}}{x^{4}y^{2}}$$

**Example D**

$$\frac{6x^{2}y^{7}}{-3xy^{3}}$$

**Example B**

$$\left(6xy^{5}\right)^{2}$$

**Example C**

$$\left( \frac{5x}{y^{3}}\right)^{2}$$

**Example A**

$$\left(6x^{3}\right)\left(5x^{4}\right)$$

**P**

**M**

**A**