**Exponent Rules**

$x^{n}x^{m}$ **=** $x^{n+m}$ **If bases are the same, when you multiply them**

 **ADD the exponents**

$\frac{x^{n}}{x^{m}}$ **=** $x^{n-m}$ **If bases are the same, when you divide them**

 **SUBTRACT the exponents**

$(x^{n})^{m}$ **=** $x^{nm}$ **When you have an exponent raised to a higher exponent**

 **MULTIPLY the exponents**

$x^{0} $**= 1 Any base (letter or number) to the 0 power is equal to 1**

$x^{-n}$**=** $\frac{1}{x^{n}}$ **To make a negative exponent positive move the variable from the denominator (bottom)to the numerator (top) or move it from the numerator (top) to the denominator (bottom)**

$-x^{n}=$$-x^{n}$ **Leave the negative sign & solve x to the nth power**

$(-x)^{n}$ **= (-x) times itself n times**

 **If n is an EVEN exponent, the answer will be a + number**

 **If n is an ODD exponent, the answer will be a - number**