

## Exponent Review

Zero Exponent = 1

$$\text{EX) } 2^0 = 1$$

Negative Exponent moves  $\uparrow$  exp. becomes +

$$\text{EX) } x^{-2} = \frac{1}{x^2}$$

$$\text{EX) } \frac{3^{\uparrow}}{y^{-2}} = 3y^2$$

(Power to a Power) = multiply exponents  $\uparrow$  keep  
the same base

$$\text{EX) } (3^2)^2 = 3^4 = 81$$

Divide bases = subtract exp.  $\uparrow$  keep  
the same base

$$\text{EX) } \frac{x^4}{x^2} = x^2$$

Multiply bases = Add exp.  $\uparrow$  keep the  
same base

$$\text{EX) } y^{-2} \cdot y^4 = y^2$$

We are done simplifying when we can not do any of the  
exponent rules  $\uparrow$  simplified numbers ( $2^2=4$ )