

Product

$$g^m \cdot g^n = g^{m+n}$$

$$2^5 \cdot 3^4 \cdot 2^6 = 2^{11} \cdot 3^4$$

Power

Quotient

$$\frac{3^5}{3^2} = 3^{5-2} = 3^3$$

Ex #2:

$$\frac{X^5 Y^3 X^2 Z^2}{X^3 Y^1}$$

Exp Equation

$$2^x = 2^{x-2}$$

$$\begin{array}{r} 2x = x - 2 \\ -x \quad -x \\ \hline x = -2 \end{array}$$

$$2^3 = 8^x \quad \text{2446} \quad 8 = 2^3$$

$$2^3 = (2^3)^x \quad 4^{2x} = 8^2$$

$$y = ab^x \leftarrow \text{Exp. Eq.}$$

$$a = \frac{y\text{-int}}$$

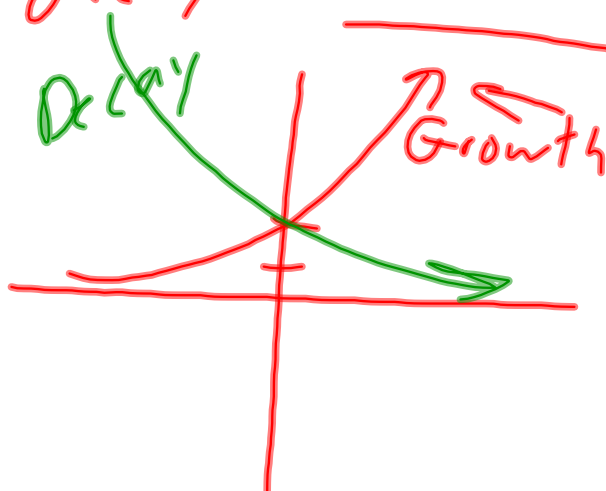
$$b = \frac{\text{Base}}$$

$$x = \frac{\text{Exponent}}$$

$$\text{growth} = \frac{b > 1}{}$$

$$\text{decay} = \frac{0 < b < 1}{}$$

$$y = 2 \cdot 3^x$$



/

$$f(t) = a(1+r)^t$$

$f(t) =$ Amount after a time period

$a =$ Initial Amount

$r =$ rate

$t =$ Number of time periods

$$f(t) = a(1+r)^t$$

$$f(6) = 1,500(1+0.05)^6$$

=

$$\star = 1500(1+0.05)^6 \wedge 666$$

\$2,010.14

