## **Practice - Exponents 3**

- 1) Evaluate each of the following:

  - a)  $2(4^3)$  b)  $3(-7)^2$

- c)  $-5(2^4)$
- d)  $2(-3^2)$

- 2) Find the value of each of the following:

  - a)  $2^2 + 2^2$  b)  $(3+7)^2 15$
- c)  $6^3 3(-5)^3$  d)  $11 + (-3)^3 3(-6^2)$

- 3) Evaluate each of the following:

  - a)  $8-3(2^2)$  b)  $(-5-3)^2+(-4)^2$  c)  $(-2)^6 \div 4^2$
- d)  $24-3^2+(7^2-5^2)$

- 4) Write each as a single power. Then, evaluate each power.
  - a)  $\frac{2^3 \cdot 2^7}{2^6}$
- b)  $\frac{(2^3)^4}{2^9}$

c)  $\frac{(10^4)^5}{(10^2)^8}$ 

d)  $\frac{(-3)^{3} \cdot (-3)}{(-3)^{4}}$ 







## **Challenging Yourself!!!**

5) Evaluate each of the following:

a) 
$$\left[ \left( 4 - 10 \right)^3 \times 3^5 \right]^0 + \left( 6 - 2^2 \right)$$

b) 
$$(4-16 \div 2^3)^4 - (6-3)^2$$

c) 
$$(3^3 \times 3)^2 + [(-2)^5 \div (-2)^2]^3$$