


EXPONENT HOMEWORK (Unit 11 Math 7 Plus)**• Zero and Negative Exponents**

 **NOTE:** When simplifying final answers should not have negative exponents unless the direction ask for negative exponents!

1) Simplify:

a) 6^0

b) $4x^0y^{-2}$

c) $-5x^{-4}$


d) $\frac{2}{3}x^{-6}$

e) $\frac{1}{4^{-3}}$


2) Evaluate when $a = 2, b = -1, c = -3$

a) $4a^2b^0$

b) $5a^{-3}$

 c) $\frac{6c^2}{b^{-1}}$

d) $-2a^{-3}b^{-2}$

3) Simplify $a^n \cdot a^{-n}$. What is the mathematical relationship of a^n and a^{-n} ? Justify your answer.4) Are $3x^{-2}$ and $3x^2$ reciprocals? Explain. Choose a fraction to use as a value for the variable a . Find the values of a^{-1} , a^2 , and a^{-2} .