Bellwork Monday, May 5, 2014

1. Simplify. Write your answer so that no exponents are negative or zero. Leave fractional answers in reduced form.

a) $(5h^4j^3k^0)^2(2h^{-6}j^4)^4$ b) $\left(\frac{4a^4b^{-2}c^7}{6a^{-2}b^{-9}c^{10}}\right)^{-3}$

2. Given the percent change find the growth or decay factor (b) that would be used in an exponential equation.

a) 30.2% increase b =

b) 80.7% decrease b =

3. Given the following exponential equations find the % change it represents and tell if it's an increase or a decrease.

a) $y = 4800\ (0.9912)^x$ b) $y = 0.875\ (1.701)^x$

c) $y = 52\ (2)^x$

4. The value of an investment in 2006 was $95,000. The investment has been decreasing 1.05% each year.

a) What was the value of the investment in 2010?

b) What was the value of the investment in 2000?

5. Match each equation to its graph.

___ a) $y = 3(2.5)^x$ ___ b) $y = 5(0.4)^x$ ___ c) $y = 3(6)^x$

___ d) $5(0.82)^x$ ___ e) $y = (2.5)^x$