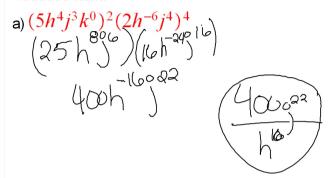
Bellwork Monday, May 5, 2014

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



- 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 = 100+30.2 = 130.2 1.30.2
- b) 80.7% decrease b = (0.7 0.7 19.3)

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

$$\frac{2a^6b^{-7}}{3c^5}$$

$$\frac{2^{-3}a^{-18}b^{-21}}{3c^5}$$

$$\frac{2^{-3}a^{-18}b^{-21}}{3c^5}$$

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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) $y = 0.875 (1.701)^{x}$

$$\frac{x 100}{99.12}$$

$$-100$$

$$\frac{x 100}{170.1}$$

$$-100$$

$$70.1$$

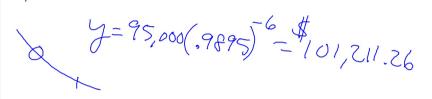
c)
$$y = 52 (2)^{x}$$

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

$$6 = .9895$$
 $100 - 1.05 = 98.95$

a) What was the value of the investment in 2010?
$$4 = 95,000 (.9895)^{4} = 91,002.40$$

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



5. Match each equation to its graph.

D a)
$$y = 3(2.5)^x$$
 B b) $y = 5(0.4)^x$ C c) $y = 3(6)^x$
A d) $5(0.82)^x$ E e) $y = (2.5)^x$

