

Bellwork Thursday, May 1, 2014

1. Does each exponential equation represent Growth or Decay?

a. $400\left(\frac{132}{133}\right)^x$
D

b. $0.015(1.003)^x$
G

c. $25,010(0.99958)^x$
D

d. $7.192\left(\frac{26}{25}\right)^{-x}$
D

2. Take each percent change and find the growth or decay factor.

- a. 16.5% decrease. $b = .835$ $100\% - 16.5\% = 83.5\%$
 b. 0.13% decrease. $b = 0.9987$ $100 - .13 = 99.87\%$
 c. 94.9% decrease. $b = 0.051$ $100 - 94.9 = 5.1\%$
 d. 220% increase. $b = 3.2$ $100\% + 220\% = 320\%$

3. For each exponential equation find the percent change and tell if it's an increase or decrease.

a. $y = 23(1.007)^x$
 $100.7\% - 100\% = 0.7\%$
7% inc

c. $y = 3500(1.64)^x$
 $164\% - 100\% = 64\%$
64% inc

b. $y = 800(0.502)^x$
 $50.2\% - 100\% = -49.8\%$
49.8% dec

d. $y = 5(0.098)^x$
 $9.8\% - 100\% = -90.2\%$
90.2% dec

4. Match each equation to its graph.

1. B $y = 2(0.45)^x$ 2. E $y = 4(2.6)^x$ 3. A $y = 2(0.86)^x$
 4. C $y = 2(0.15)^x$ 5. D $y = 4(8)^x$ 6. F $y = 2(1.25)^x$

