ALG 2B
CH 8
Review 8.1-8.2
w/ 8.3 graphing

Determine whether each equation represents exponential growth or exponential decay. ~~Find the rate of increase or decrease for each model. Graph each equation.~~

6. $y = 5^x$ **7.** $y = 2(4)^x$ **8.** $y = 0.2(3.8)^x$ **9.** $y = 3(0.25)^x$

Write an exponential function to model each situation. Find the value of each function after five years, to the nearest dollar.

14. A \$12,500 car depreciates 9% each year.

15. A baseball card bought for \$50 increases 3% in value each year.

For 18-21, a) make parent table w/ x: -2, -1, 0, 1, 2
b) make translation table

x ± h	y ± k

c) make new table by switching the x's + y's from part b's table
d) Graph final table

18. $y = -3^x + 1$ **19.** $y = 8^x - 1$

20. $y = 2(2)^{x+1} + 3$ **21.** $y = -2\left(\frac{1}{3}\right)^{x-2}$

Find the amount in a continuously compounded account for the given conditions.

22. principal: \$1000, annual interest rate: 4.8%, time: 2 yr

23. principal: \$250, annual interest rate: 6.2%, time: 2.5 yr

24. principal: \$500, annual interest rate: 8.5%, time: 3 yr

Use $A = Pe^{rt}$