Name _____ Date _____ Class_____

13.3 review:

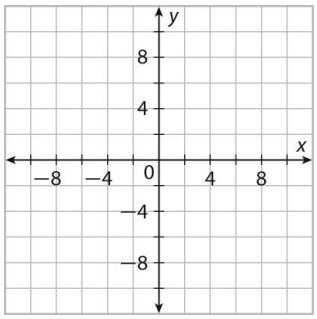
a. Identify *a*, *h*, and *k*.
b. Identify and plot the reference points.
c. Draw the graph.
d. State the domain and range in set notation.

1. $g(x) = 2e^{x} - 4$

a. _____

b. _____

c.



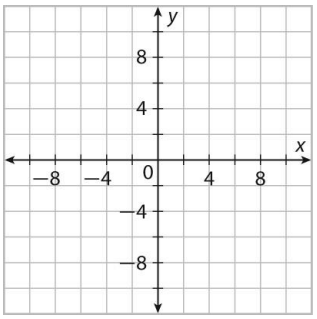
d. _____

2. $g(x) = e^{x-5} + 3$

a. _____

b. _____

c.



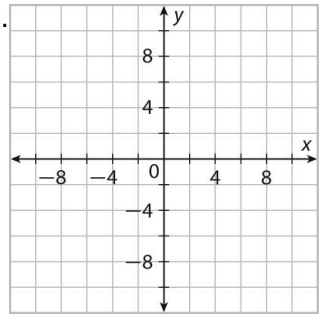
d. _____

3. $g(x) = 0.5e^{x+4} - 1$

a. _____

b. _____

c.



d. _____

Solve.

4. When interest is compounded continuously, the amount A in an account after t years is found using the formula $A = Pe^{rt}$, where P is the amount of principal and r is the annual interest rate.

   a. Use the formula to compute the balance of an investment that had a principal amount of $4500 and earned 5% interest for 6 years.

   _____

   b. What is the amount of interest earned in the investment?

   _____

Name _____ Date _____ Class_____

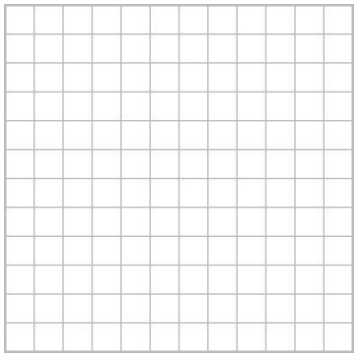
13.4 review

For each investment described, (a) write an exponential growth model that represents the value of the account at any time *t*, and (b) use a graphing calculator to solve for *t* for the given value.

1. The principal amount, $6250, earns 4.25% interest compounded annually. How long will it take for the account's value to surpass $9500?

   a. _____

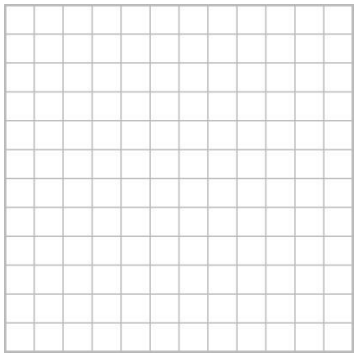
   b. _____



2. The principal amount, $4200, earns 3.6% interest compounded quarterly. How long will it take for the account's value to surpass $15,000?

   a. _____

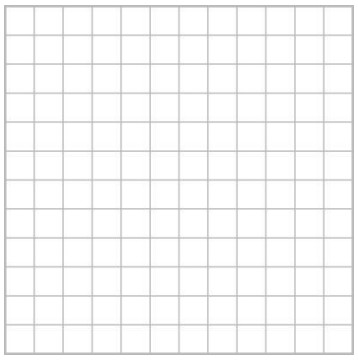
   b. _____



3. The principal amount, $13,000, earns 8.7% interest compounded continuously. How long will it take for the account's value to reach $80,000?

   a. _____

   b. _____



Solve.

4. Shiloh plans to make a deposit into one of the accounts shown in the table. He wants to choose the account with the highest effective interest rate, *R*.

	Account A	Account B
Nominal Interest Rate	4.25%	4.8%
Compounding Period	Monthly	Semiannually

   a. Find R_A and R_B. _____

   b. Which account should he choose? _____