Algebra 2B 8.2 Review **Name**_____**HR**__

Graph the exponential function.

1. $y = 4^x$

2. $y = 4^{x-1} + 3$

Describe the transformations of the parent function. Graph, find domain and range.

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

4. $y = 3(5)^{x-2} + 1$

4. What do A, P, r & t represent in the formula $A = Pe^{rt}$?

5. You invest $10,000 at 2% interest compounded continuously. What is its value after 15 years?

6. You invest $300 at 1.5% interest compounded continuously. What is its value after 5 years?

Write the new function for each translation of the parent function $y = ab^x$.

7. 4 units down

8. 2 units left

9. 1 unit right and 3 units up

10. 3 units left and 5 units down