

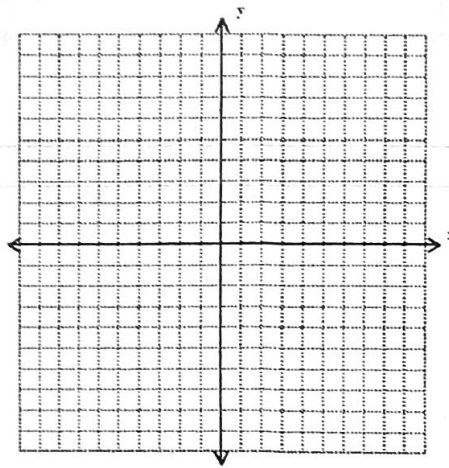
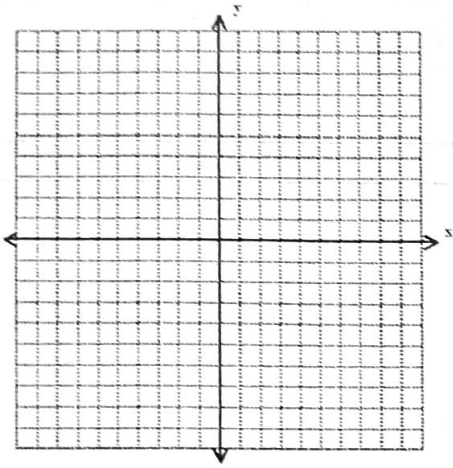
Name: _____

Graphs of Exponential Functions

Identify the transformations for each of the following functions. Graph the function.

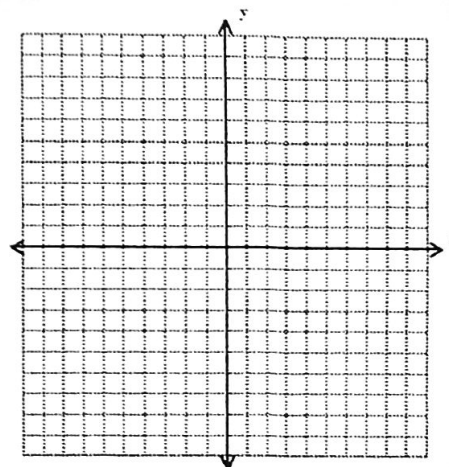
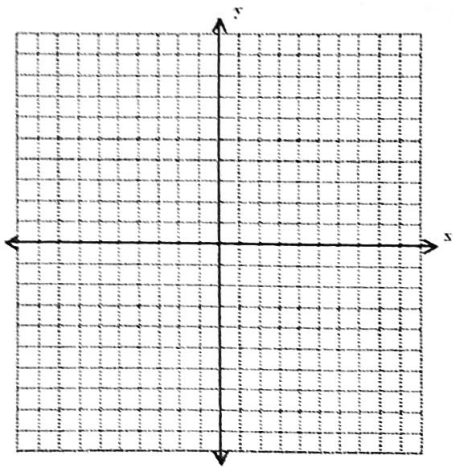
1. $y = 2 \cdot e^{x-4} + 3$

2. $f(x) = \log_3 x - 8$



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

4. $f(x) = \ln(x + 5) - 1$



Find the x- and y-intercepts.

9. $f(x) = 5^{x+1} - 2$

10. $f(x) = \frac{1}{2} \cdot e^x$

11. $f(x) = \ln(x - 1) + 2$

12. $f(x) = \frac{1}{2} \log_3 x$

Find the horizontal asymptote for each of the following functions. Then find the range.

13. $f(x) = -2^x - 7$

14. $f(x) = \frac{1}{3}(2)^{x-3}$

Find the vertical asymptote for each of the following functions. Then find the domain.

15. $f(x) = -\log_2 x - 7$

16. $f(x) = \frac{1}{3} \ln(x - 3)$

Identify the base. Then identify all of the transformations for each of the following functions.

17. $y = 2(e)^{x-4} + 3$

18. $y = -2\log_3 x + 5$

19. $f(x) = -\frac{1}{3}^{x+6} - 3$

20. $f(x) = \ln(x + 1)$