Offline HW 4

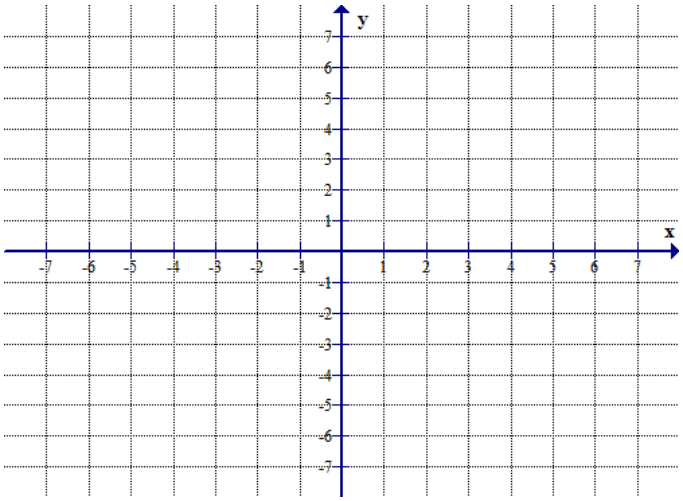
This assignment is due on **Friday, April 13**. No extensions will be given.

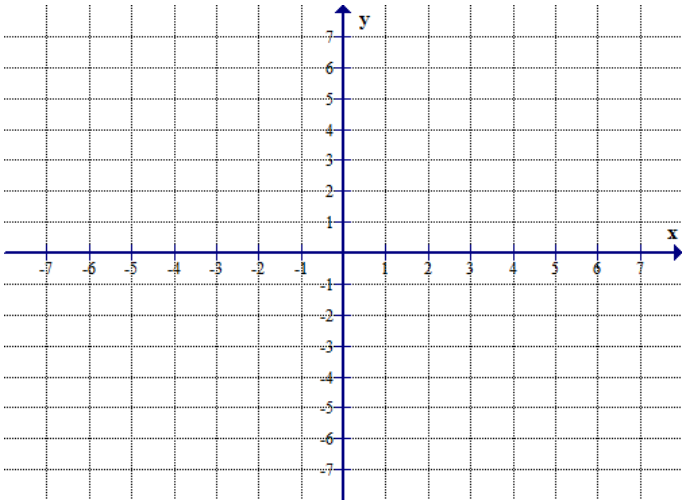
1. Use transformations to graph $f(x) = -e^{\frac{1}{2}x+3}$. Start with the basic function. Plot at least 2 points on the graph of the basic function and **use them** to perform transformations (Do not graph the other functions by plotting the points!) Show one transformation at a time in a correct order (clearly labeled). Write the equation for each graph. *Please remember that graphing calculators are not allowed in this course. Also, you will have no calculators on the tests, so make sure you know how to graph the basic function and its transformations.*

a) Basic function: y = _____

b) Transformation: _____

y = _____



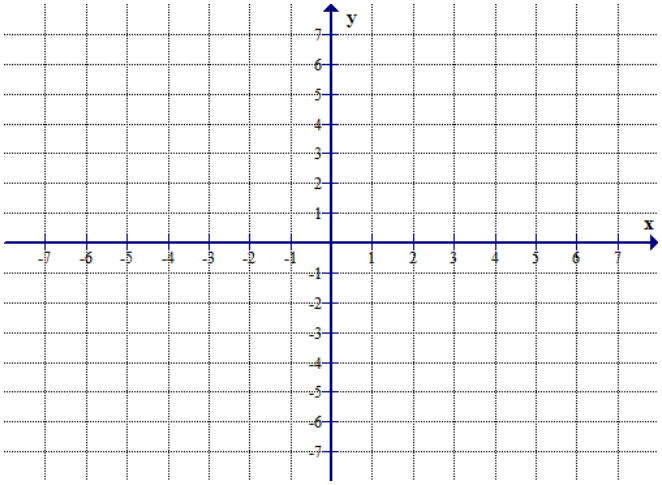


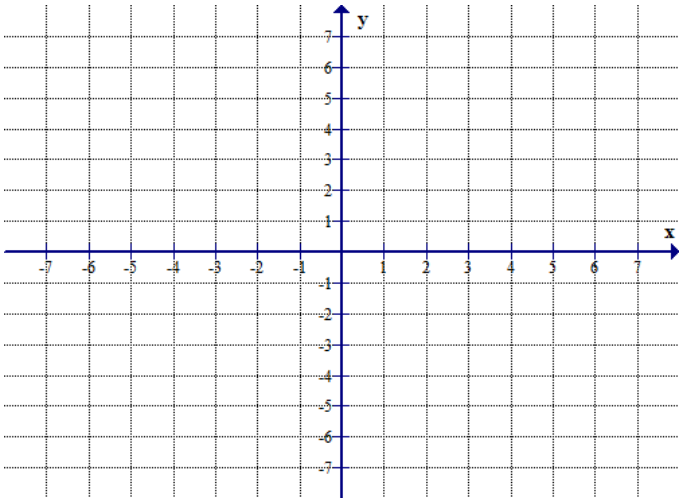
c) Transformation :_____

y = _____

d) Transformation :_____

y = _____



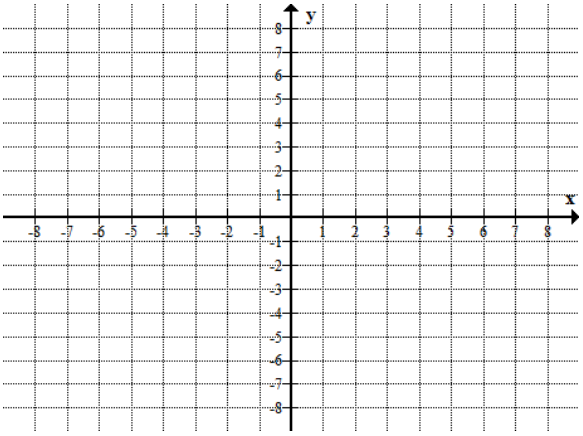


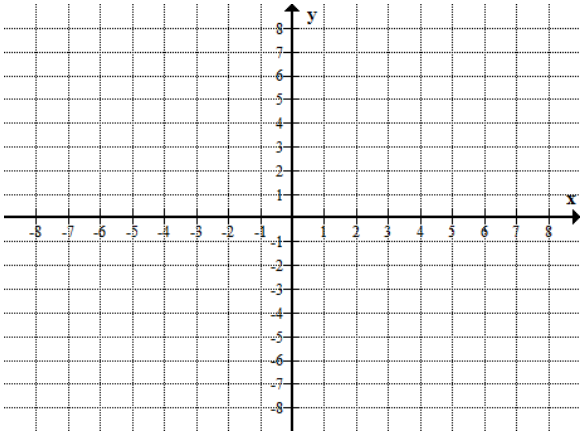
2. Use transformations to graph $f(x) = \log_7(-2x - 1)$. Start with the basic function. Plot **accurately** at least 2 points on the graph of the basic function and **use them** to perform transformations (Do not graph the other functions by plotting the points!) Show one transformation at a time in a correct order (clearly labeled). Draw asymptotes, if any. *Please remember that graphing calculators are not allowed in this course. Also, you will have no calculators on the tests, so make sure you know how to graph the basic function and its transformations.*

a) Basic function: y = _____

b) Transformation: _____

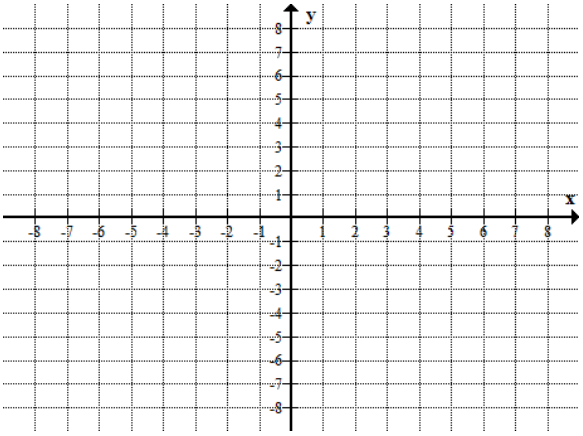
y = _____





c) Transformation :_____

y = _____



d) Transformation :_____

y = _____