Offline HW 5

This offline assignment is **due** <mark>**Tuesday, 2/27**</mark>. No extensions will be given.

The overall look of your paper will count toward your grade. Submissions on other paper will not be graded.
 You must graph the functions neatly and accurately! ("Accurately" means that the graph passes through the points that satisfy the equation, not just have a general shape of the family of functions to which it belongs. For example, the graph of $y = x^2$, should be a parabola that passes through $(0,0)$, $(\pm1,1)$, $(\pm2, 4)$ not any other parabola shape)

This must be **YOUR work**; you are not allowed to ask tutors, friends or family members for help. You CAN however consult with your classmates. If you choose to do so, each of you must submit a separate paper and the name of the person(s) with whom you collaborated must be written on this paper. The papers that are **suspiciously identical will receive 0 credit**.

Use transformations to graph $f(x) = -e^{\frac{1}{2}x-3}$. Start with the basic function. Plot at least 4 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. You will have no calculators on the tests, so make sure you know how to graph the basic function and its transformations. You MUST know approximate value of e!*
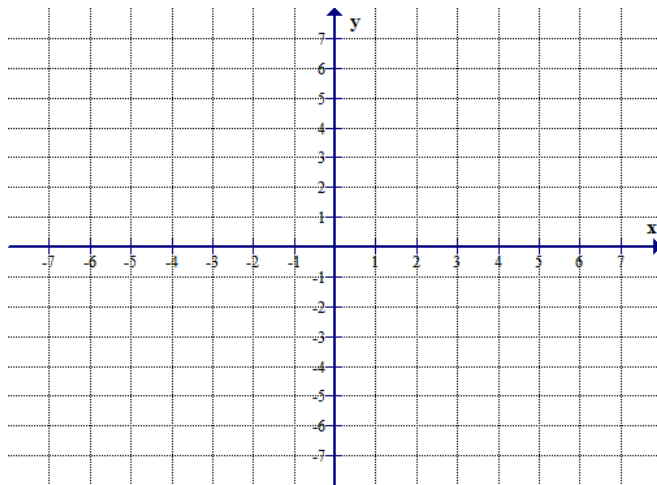
a) Basic function: y = _____

b) Transformation: _____

y = _____
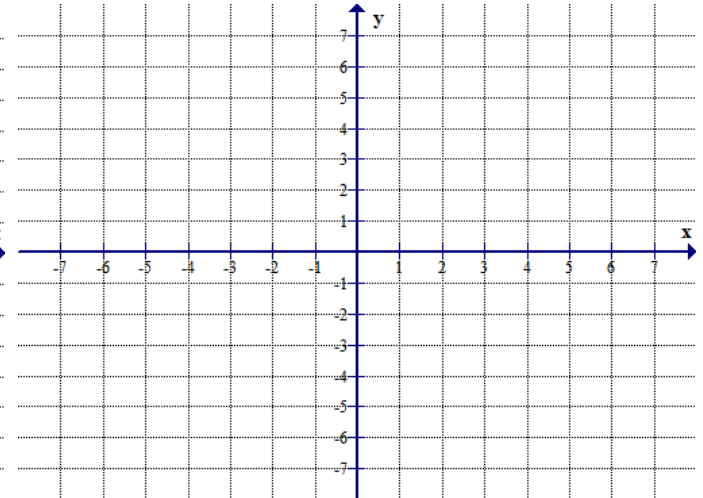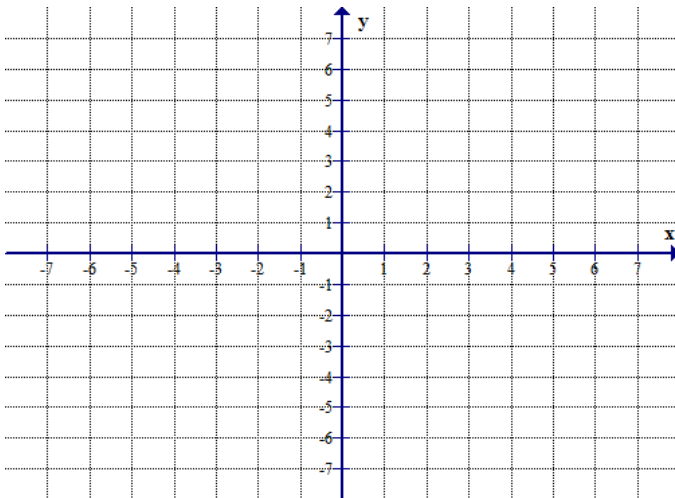
c) Transformation :_____

  y = _____

d) Transformation :_____

  y = _____