SECONDARY MATH II
PARENT FUNCTIONS
TRANSFORMATION PRACTICE WS

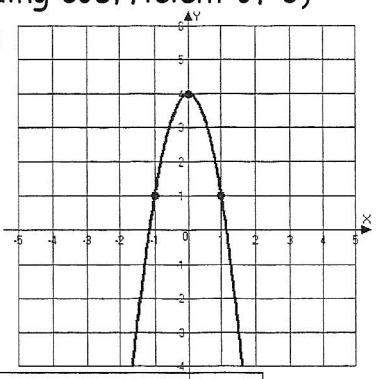
NAME _____
DATE _____
HOUR _____

Instructions: For the following functions,

1. identify the parent function
2. describe each of the transformations to the parent function
3. sketch a graph of the function

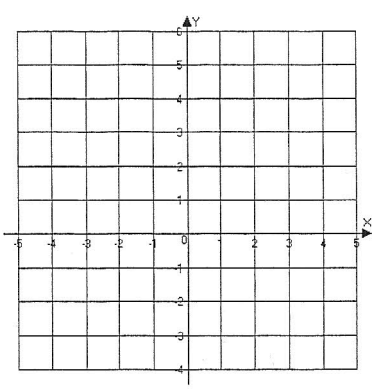
Example: $y = -3x^2 + 4$

1. The parent function is the quadratic, $y = x^2$.
2. Transformations: Reflected across the y-axis (indicated by negative in front)
   Stretched by factor of 3 (indicated by the leading coefficient of 3)
   Shifted 4 units upward (as indicated by the +4)
3. Graph----------→

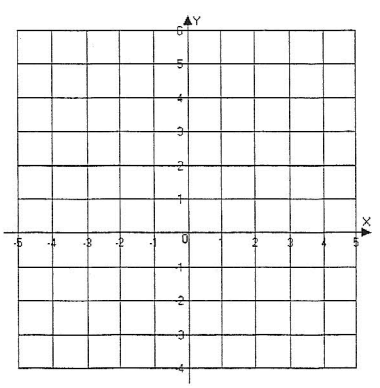


Your turn:

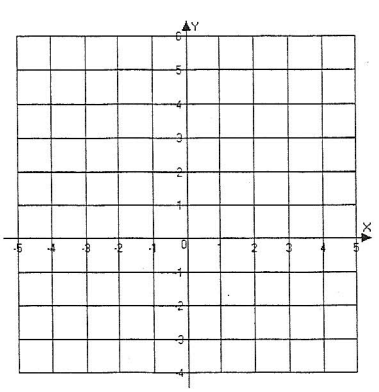
1. $y = -|x| + 4$



2. $y = -x^3 - 2$



3. $y = 2\sqrt{x} + 1$



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