Transformations Practice
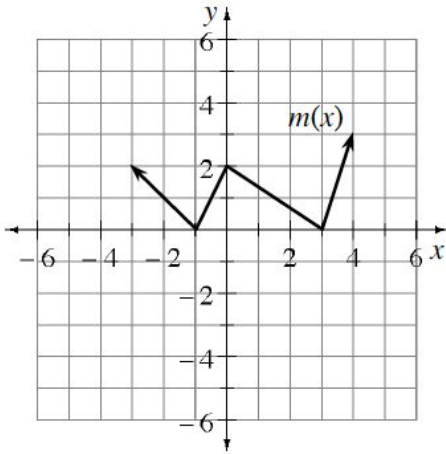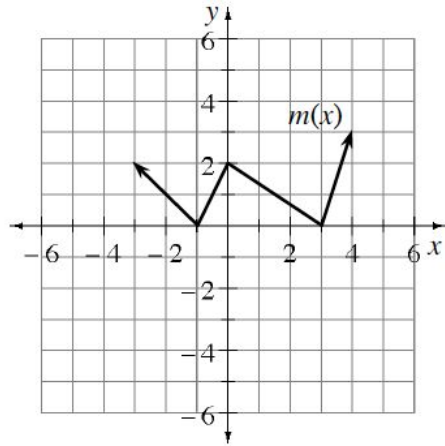
1. Given the graph of m(x), sketch the graph of the following functions, and state the domain and range for each. Think about your order of operations when completing each transformation.
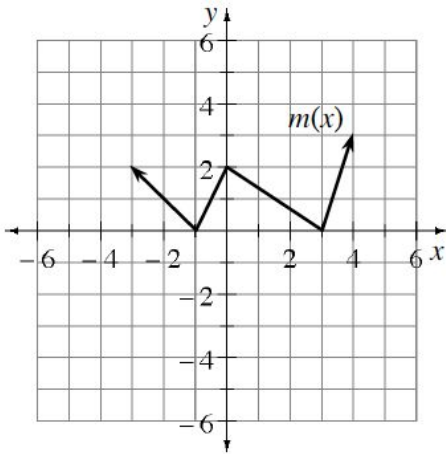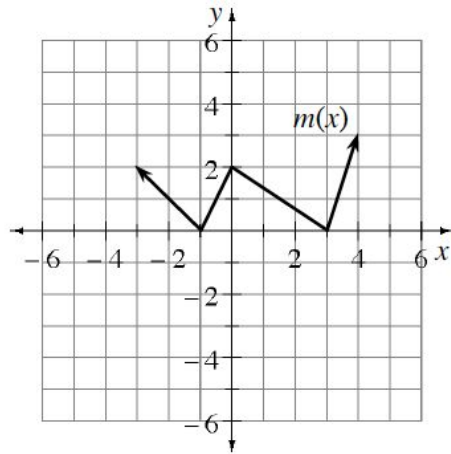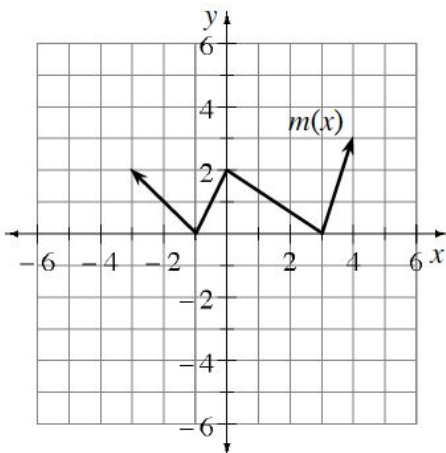
a. $y = -2m(x)$
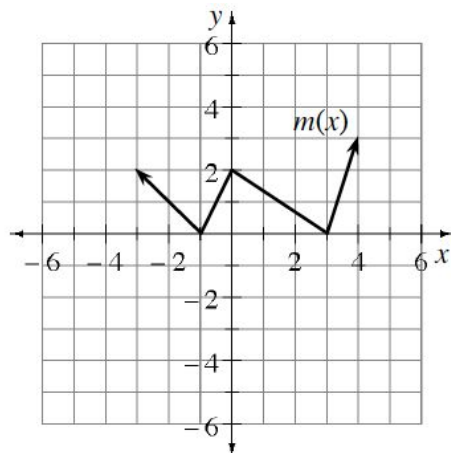
b. $y = m(x+2) - 1$

c. $y = m(2x)$

d. $y = m(-x)$

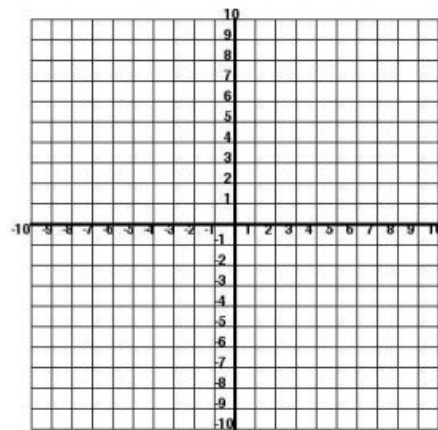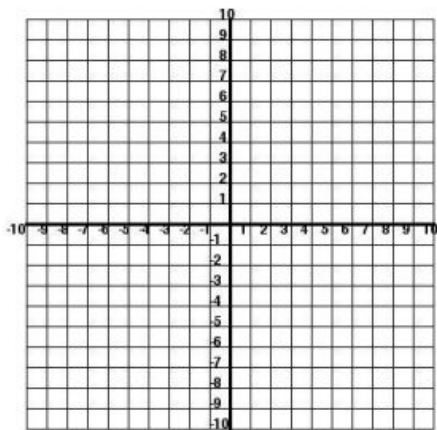

e. $y = m(x-1) + 2$

f. $y = \frac{1}{2}m(x) + 1$

2. For each function below:

a. Describe the transformations that have been applied to obtain the function from the given "base function".

b. Use your knowledge of the graph of the base function, and the transformations, to graph the function.

a. $y = -2(x+3)^3 + 5$, $y = x^2$

b. $y = 3\sqrt{-x} - 5$, $y = \sqrt{x}$

c. $y = \frac{1}{x+3} - 4$, $y = \frac{1}{x}$

d. $y = \sqrt{\frac{1}{2}x} - 2$