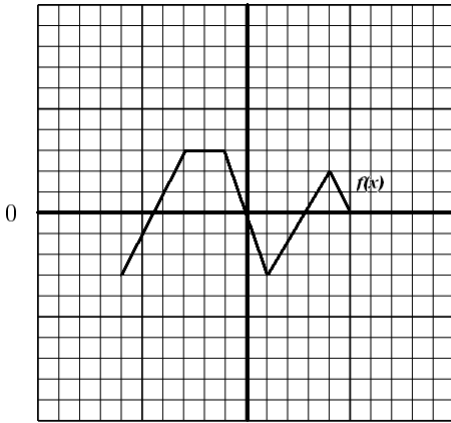


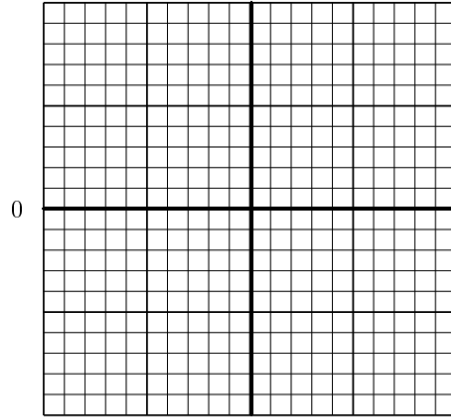
Math 111 Worksheet 7

Show all work for full credit.

1. Use the graph of the function $f(x)$ to sketch the graph of $g(x)$.

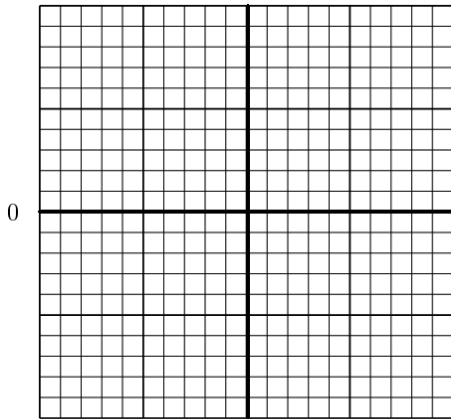


0



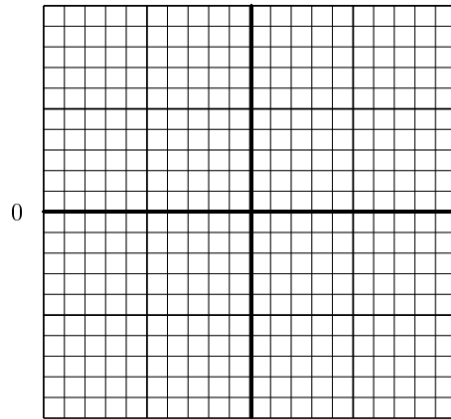
0

↑ a. $g(x) = 3f(x)$



0

↑ b. $g(x) = f(x+3) - 5$



0

↑ c. $g(x) = -f(x) + 3$

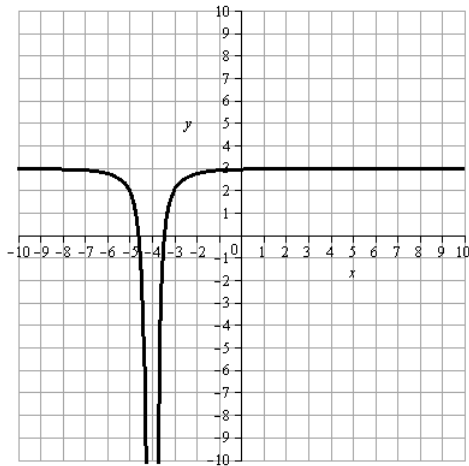
2. Write the equation of the function described by the given characteristics.

a. The shape of $f(x) = |x|$, but reflected in the x-axis, moved five units to the right and eight units upward.

b. The shapes of $f(x) = \sqrt{x}$, but shifted four units to the left and three units down.

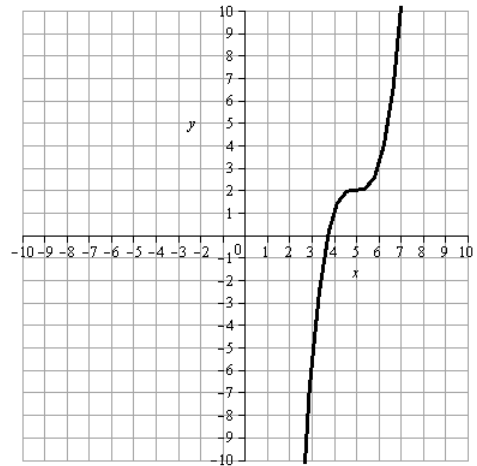
3. Write a possible equation for the function whose graph is shown. Each graph shows a transformation of a common function. (There are no stretches or compressions.)

a.



$y =$ _____

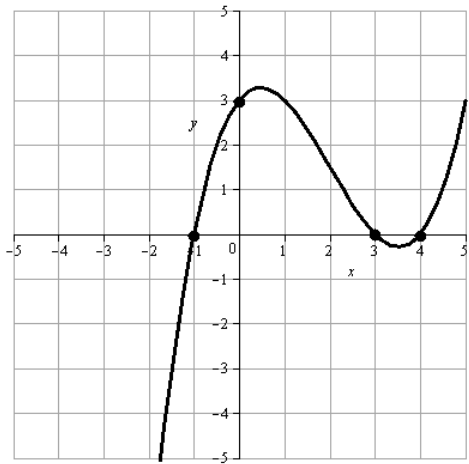
b.



$y =$ _____

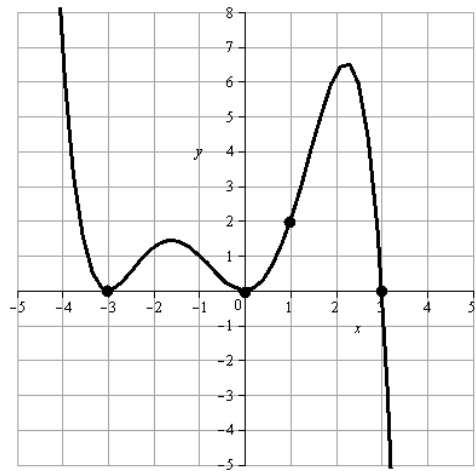
4. Give a possible formula for the polynomials.

a.



$y =$ _____

b.



$y =$ _____