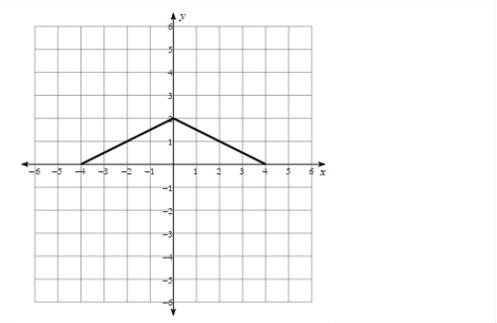


Directions: Describe all the transformations on the given function.

1) $f(x) = \left| \frac{1}{4}(x - 2) \right| - 5$

2) $g(x) = -4(x + 1)^3 + 5$

Directions: Write $g(x)$ in terms of $f(x)$ after performing the given transformation of the graph $f(x)$.

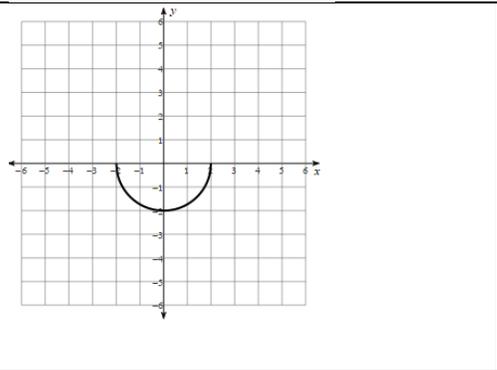


3a) Transform the graph with a vertical compression of $\frac{1}{2}$ and a horizontal shift of right 2.

3b) Write $g(x)$ in terms of $f(x)$.

4a) Transform the graph with a reflection on the x-axis and a vertical shift down 1.

4b) Write $g(x)$ in terms of $f(x)$.



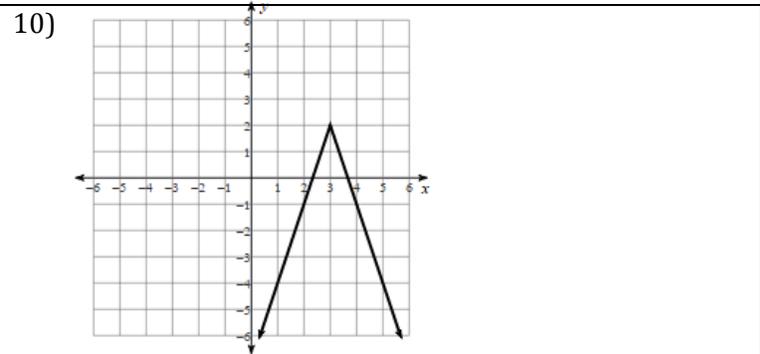
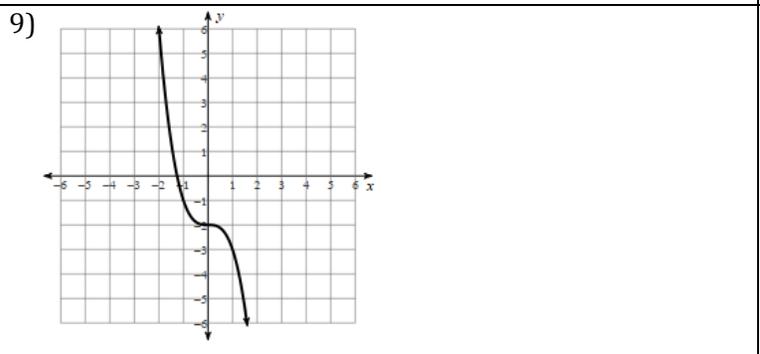
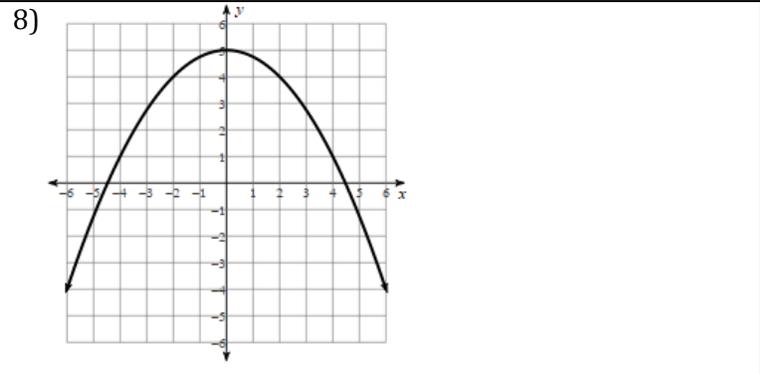
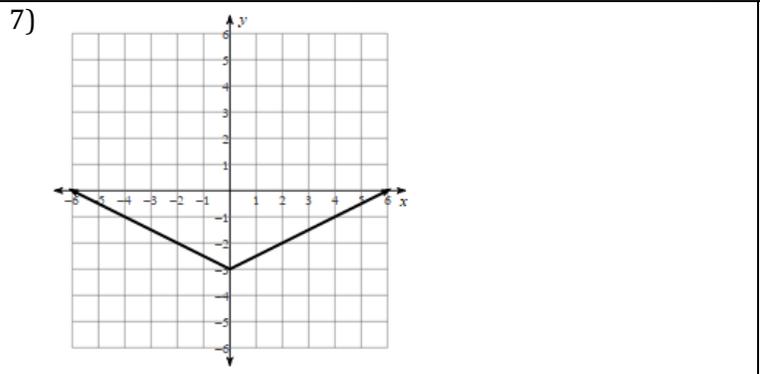
5a) Transform the graph with a vertical stretch of 3 and a horizontal shift of right 2.

5b) Write $g(x)$ in terms of $f(x)$.

6a) Transform the graph with a horizontal compression of $\frac{1}{2}$ and a vertical shift down 2.

6b) Write $g(x)$ in terms of $f(x)$.

Directions: Write a function, $g(x)$ that is a translation of the parent function.

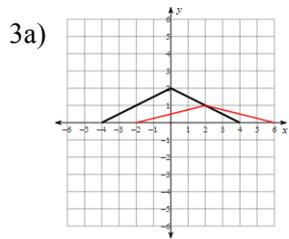


05.2 Transformations of Functions, Pt 2

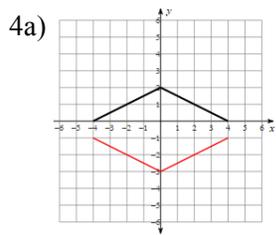
Corrective Assignment Answers

1) Vertical shift down 5, Horizontal shift right 2, horizontal stretch of 4

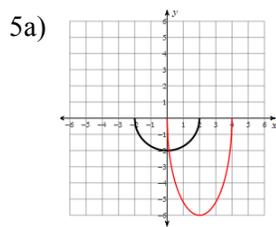
2) Vertical shift up 5, Horizontal shift left 1, vertical reflection, vertical stretch of 4



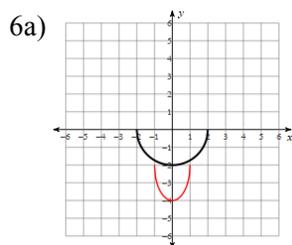
$$3b) g(x) = \frac{1}{2}f(x - 2)$$



$$4b) g(x) = -f(x) - 1$$



$$5b) g(x) = 3 \cdot f(x - 2)$$



$$6b) g(x) = f(2x) - 2$$

$$7) f(x) = \left| \frac{1}{2}x \right| - 3$$

$$8) g(x) = \left(\frac{1}{2}x \right)^2 + 5$$

$$9) f(x) = -x^3 - 2$$

$$10) f(x) = -3|x - 3| + 2$$