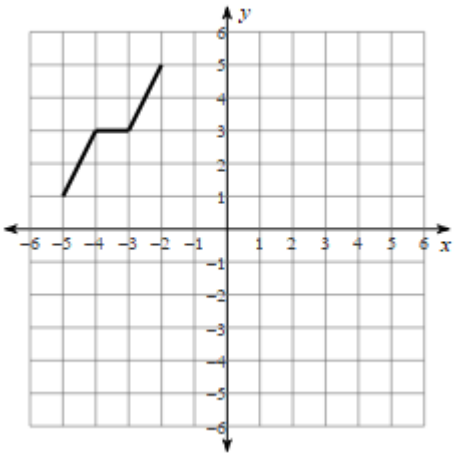
5.1Transformations of Functions, Pt 1

CA #2

Name:_____

Directions: a) Perform the translation on the given function (right on graph). B) Then, write g(x) in terms of f(x) after performing the given transformations.



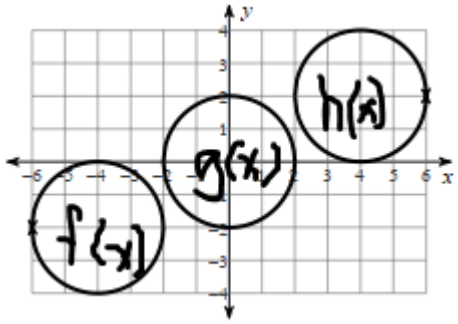
1a) Translate the graph units to the 5 right and 6 units down.

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

2a) Translate the graph 2 units right.

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

Directions: a) Describe the shift from f(x) to the given function. b) Write g(x) in terms of f(x) after performing the given transformations.



3a) Describe the shift from f(x) to g(x)

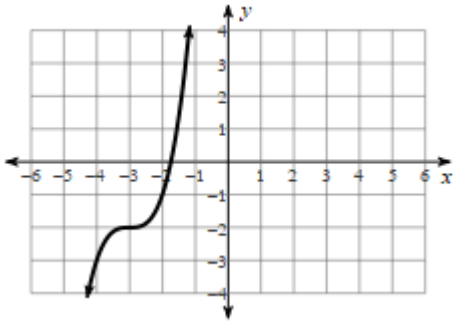
b) Write g(x) in terms of f(x).

4a) Describe the shift from f(x) to h(x)

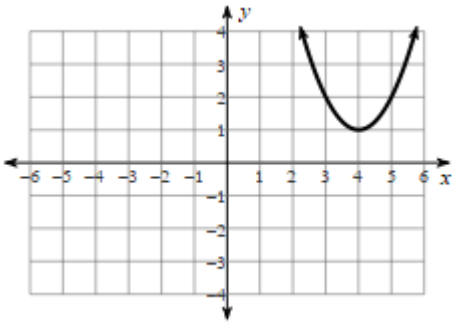
b) Write h(x) in terms of f(x).

Directions: Write the equation of each graph.

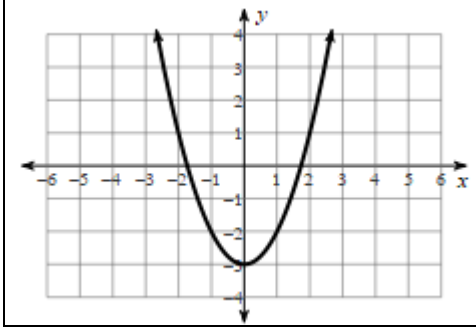
5)



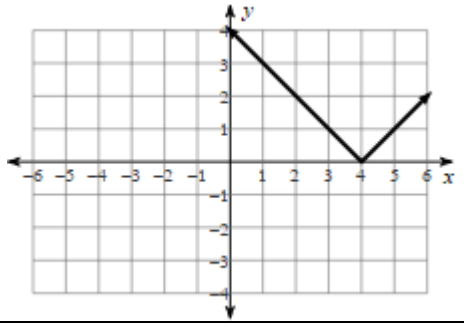
6)



7)

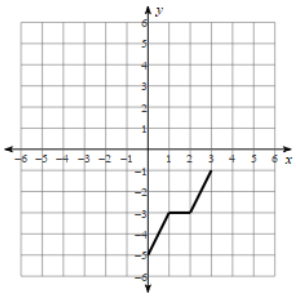


8)

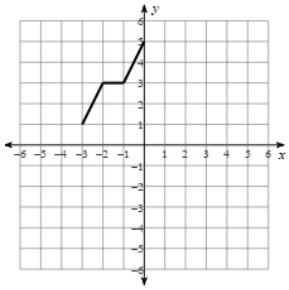


5.1Transformations of Functions, Pt 1

Corrective Assignment Answers

1a) 

1b) g(x) = f(x - 5) - 6

2a) 

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

3a) It shifts right four units and up two units. 3b) g(x) = f(x – 4) + 2

4a) It shifts right 8 units, and up 4. 4b) g(x) = f(x - 8) +4

5) $f(x) = (x + 3)^3 - 2$

6) $f(x) = (x - 4)^2 + 1$

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

8) $f(x) = |x - 4|$