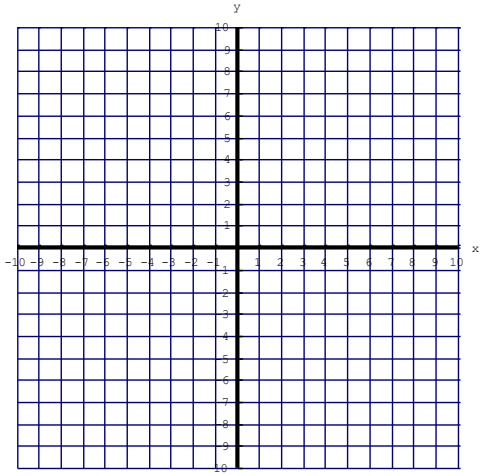
Module 7 Review

You are given the equation of $f(x)$ and the transformation $g(x)$. Graph both $f(x)$ and $g(x)$ *and* write the linear equation for $g(x)$ below the graph.

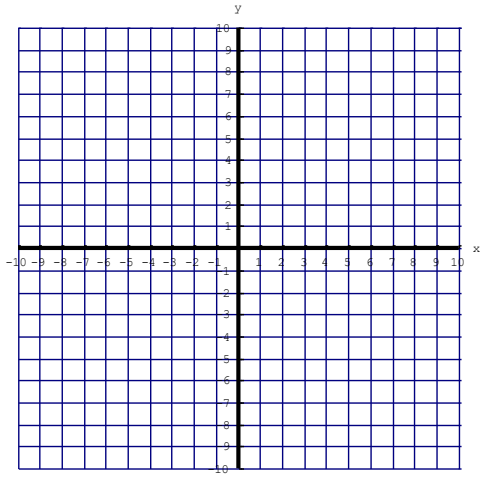
1. $f(x) = 2x - 1$
   $g(x) = f(x) + 3$

$g(x) =$ _____



2. $f(x) = -\frac{2}{3}x + 5$
   $g(x) = f(x - 4)$

$g(x) =$ _____



You are given information about $f(x)$ and $g(x)$. Rewrite $g(x)$ in translation form: $g(x) = f(x) + k$

4. $f(x) = 7x + 13$
   $g(x) = 7x + 4$

$g(x) =$ _____
Translation form

5. $f(x) = 22x - 12$
   $g(x) = 22x + 8$

$g(x) =$ _____
Translation form

7.

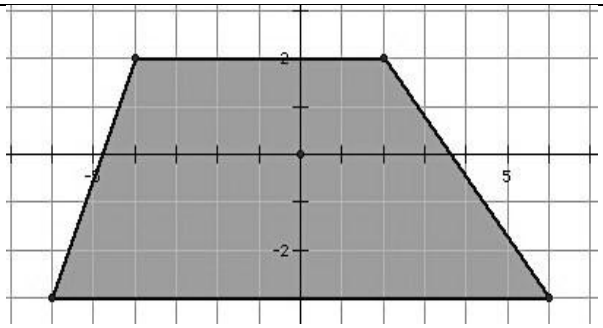
x	$f(x)$	$g(x)$
3	11	26
10	46	61
25	121	136
40	196	211

$g(x) =$ _____
Translation form

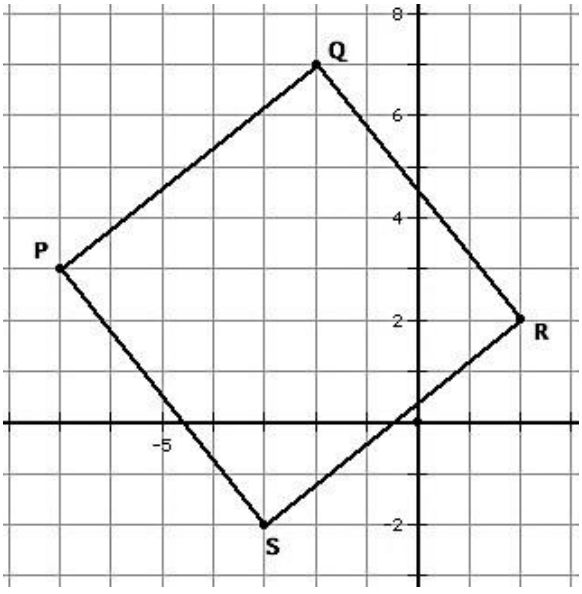
8.

x	$f(x)$	$g(x)$
-4	5	-42
-1	-1	-48
5	-13	-60
20	-43	-90

$g(x) =$ _____
Translation form

Find the perimeter of the figure on the right.	
Find the slope and the distance between **(4, -6) and (3, -12)**	Slope = _____ Distance = _____

Prove that quadrilateral PQRS on the graph is a rectangle.

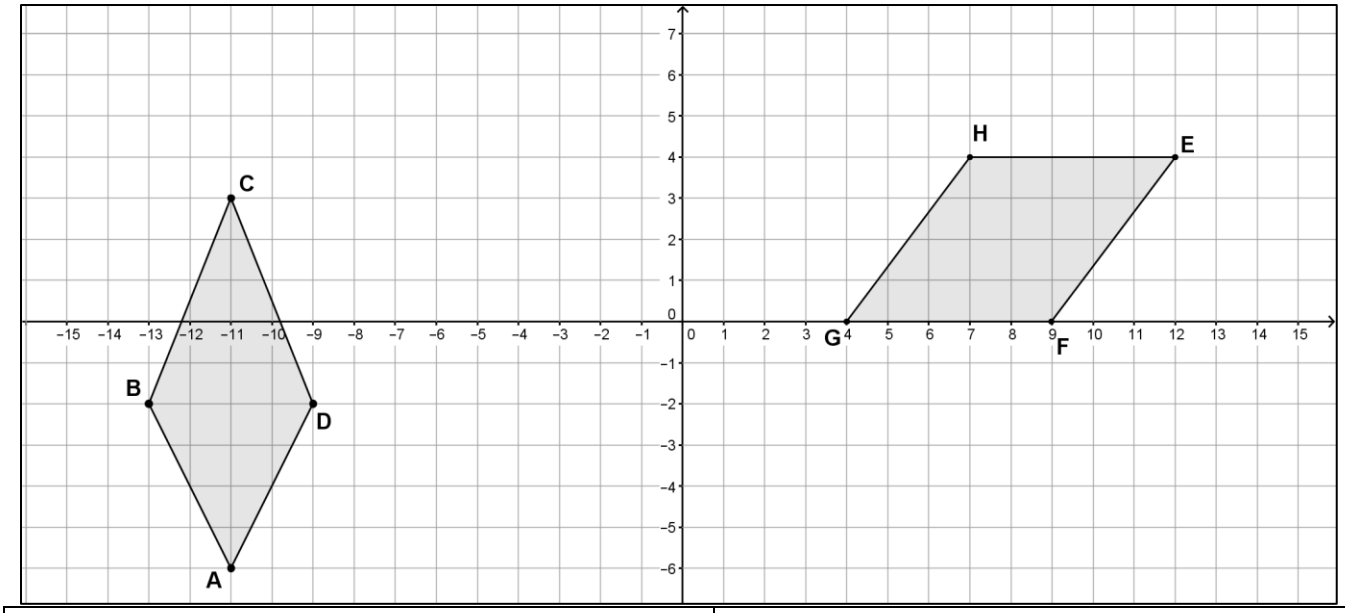


Goal:

WTS:

Evidence:

Conclusion:



Prove that quadrilateral ABCD on the graph is a parallelogram.

Goal:

WTS:

Evidence:

Conclusion:

Prove that quadrilateral EFGH on the graph is a rhombus.

Goal:

WTS:

Evidence:

Conclusion: