

## Worksheet #1 Lesson 1.3 Assignment

Let  $g(x)$  be the indicated transformation of  $f(x)$ . Write the rule for  $g(x)$ . Show your work!

1.  $f(x) = 2x - 6$   
vertical shift up 4

2.  $f(x) = 2x - 6$   
vertical shift down 6

3.  $f(x) = 5x - 3$   
horizontal translation left 3

4.  $f(x) = 5x - 3$   
horizontal translation right 4

5.  $f(x) = -3x - 7$   
reflection across the  $x$  - axis

6.  $f(x) = -3x - 7$   
reflection across the  $y$  - axis

7.  $f(x) = 2x + 9$   
vertical compression by  $\frac{1}{3}$

8.  $f(x) = 2x + 9$   
horizontal compression of  $\frac{1}{2}$

9.  $f(x) = -x - 4$   
horizontal stretch by 2

10.  $f(x) = -x - 4$   
vertical stretch by 3