

Worksheet #2 Lesson 1.3 Assignment

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

1. $f(x) = x - 3$
vertical shift up 4

2. $f(x) = -\frac{1}{2}x + 1$
horizontal translation right 2

3. $f(x) = 7x + 4$
vertical shift down 8

4. $f(x) = 2x$
horizontal translation left 6

5. $f(x) = 2x + 5$
horizontal compression by a factor of $\frac{1}{2}$

6. $f(x) = 5x + 4$
horizontal stretch by a factor of 5

7. $f(x) = -6x - 1$
vertical compression by a factor $\frac{2}{3}$

8. $f(x) = x - 1$
vertical stretch by a factor of 7

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

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

11. $f(x) = x$
horizontal shift up 4
horizontal shift right 2 units

12. $f(x) = x$
vertical compression by a factor of $\frac{1}{8}$
horizontal translation right 8 units

Write the linear function defined by the following table, then transformation the function.

13.

x	y
0	4
2	1
4	-1

Horizontal compression by $\frac{1}{2}$, following by a vertical shift up 3 units.