

Transformations of Functions • Practice

Example 1

Describe each translation as it relates to the graph of the parent function.

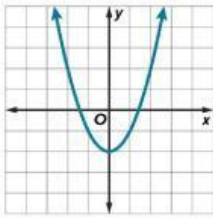
1. $y = x^2 + 4$

2. $y = |x + 6|$

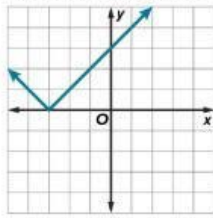
Example 2

Use the graph of each translated parent function to write its equation.

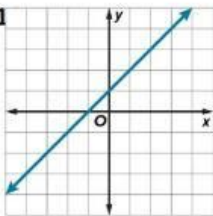
3.



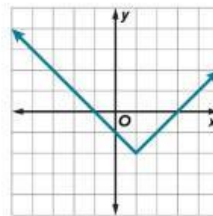
4.



5.



6.



Examples 3 and 4

Describe each dilation and reflection as it relates to the parent function.

7. $y = (-3x)^2$

8. $y = -6x$

9. $y = -4|x|$

10. $y = -\frac{2}{3}x$

Example 5

Describe each transformation as it relates to the graph of the parent function.

11. $y = -6|x| - 4$

12. $y = 3x + 11$

13. $y = \frac{1}{3}x^2 - 2$

14. $y = \frac{1}{2}|x - 1| + 14$

Example 6

- 15. SALAD** The cost for a salad depends on its weight, x , in ounces, and is described by $c(x) = 4.5 + 0.32x$. Describe how $c(x)$ is related to its parent function and interpret the function in the context of the situation.

Example 7

Write an equation for each function.

