

## Unit 1a Review

State the transformations made to the parent function:

1.  $y = -2|x - 3| + 3$

2.  $y = (-2x + 4)^2 - 4$

3.  $y = -\frac{1}{5}(x - 3)^3 - 4$

4.  $y = \sqrt{-\frac{1}{4}x - 3} - 2$

5.  $y = |x - 3| + 4$

6.  $y = -(3x + 4)^2 - 2$

Write an equation for the description given as transformed from the parent function:

7.  $f(x) = x^2$

Reflection over the y-axis, vertically stretched by a factor of 5, left 3, and up 4

8.  $f(x) = \sqrt{x}$

Reflection of the x-axis, horizontally compressed by  $\frac{1}{2}$ , right 4, and down 6

9.  $f(x) = x^3$

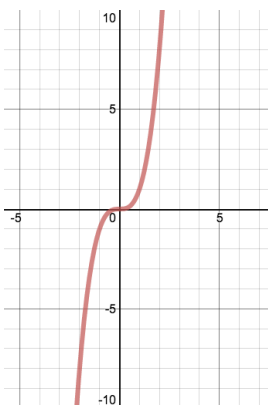
Horizontally stretched by a factor of 6, down 7

10.  $f(x) = |x|$

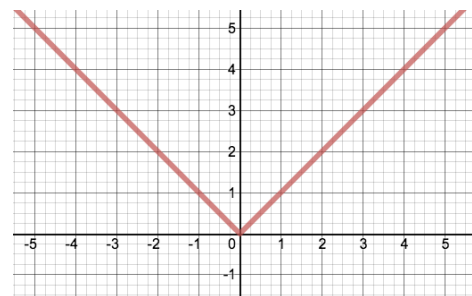
Vertically compressed by a factor of  $\frac{1}{4}$ , left 2, up 12

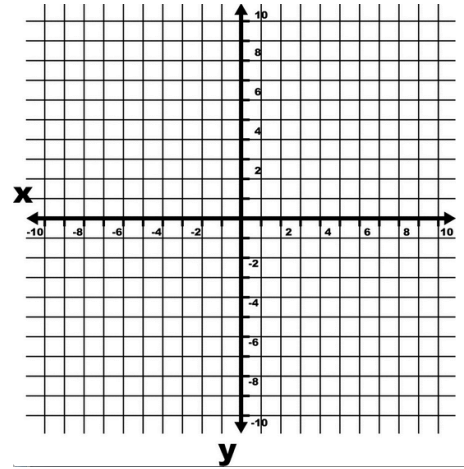
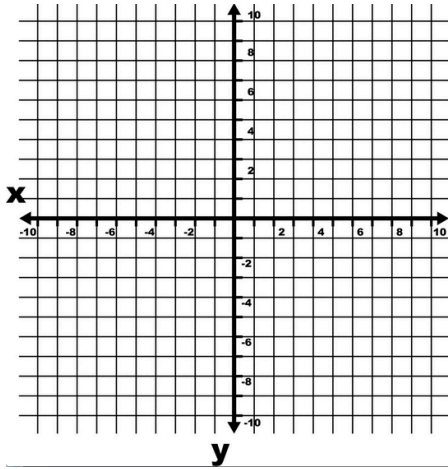
Write an equation for the description given as transformed from the parent function, then graph.

11. x-axis reflect, Vertical compression by  $\frac{1}{3}$ , right 3, down 5



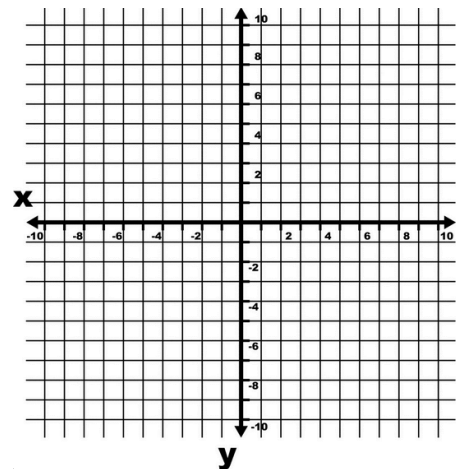
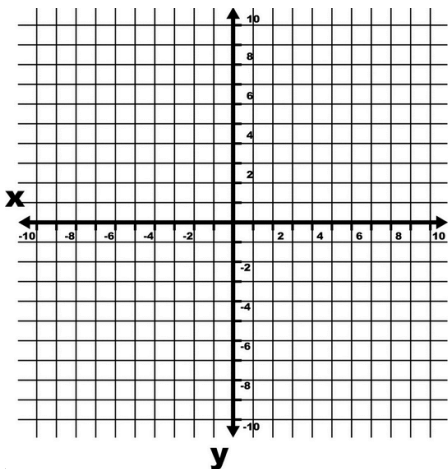
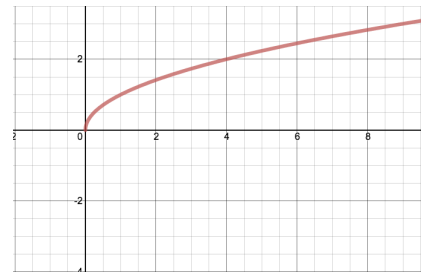
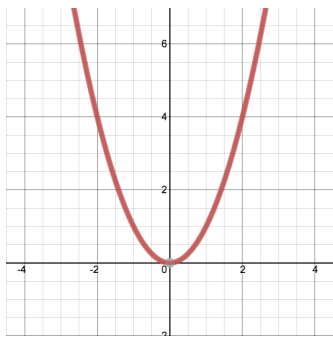
12. x-axis reflect, vertical compression by  $\frac{1}{2}$ , right 4, down 3





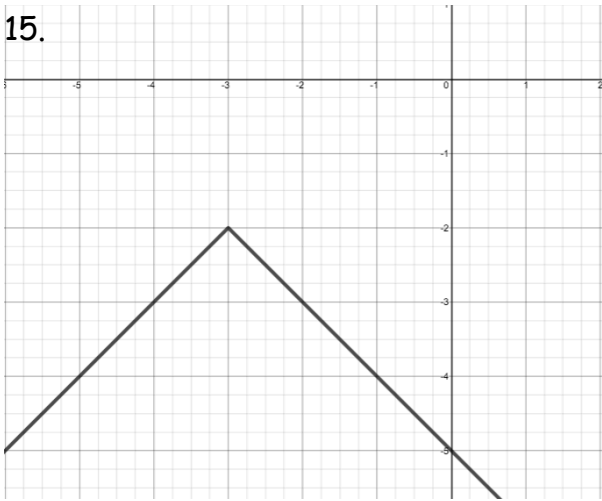
13. y-axis reflect, up 2

14. x-axis reflect, left 3, up 4

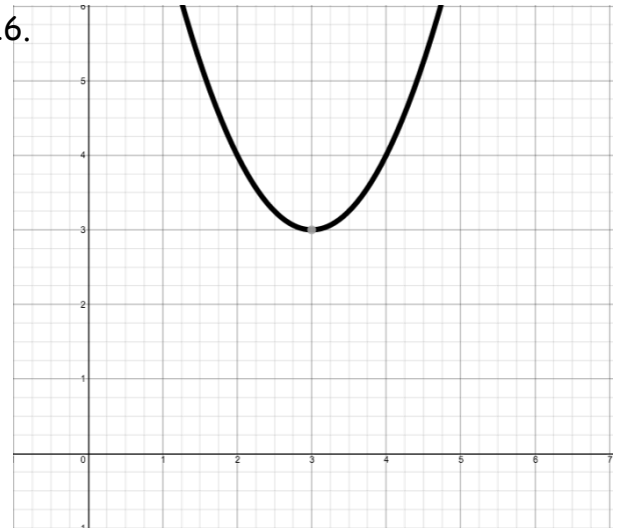


State the transformations made to the parent function then write the equations for the transformed function

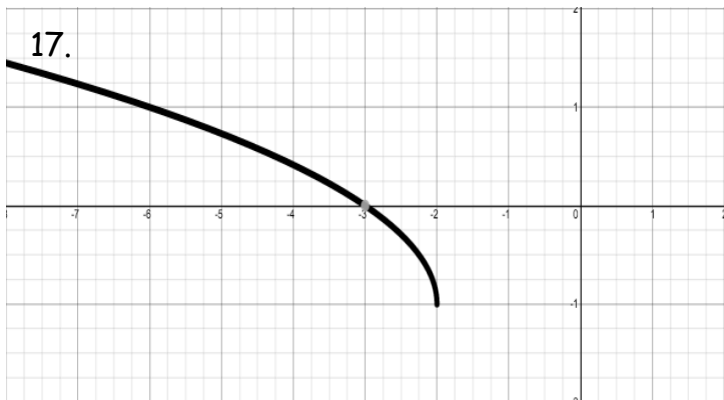
15.



16.



17.



18.

