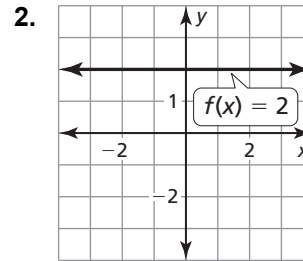
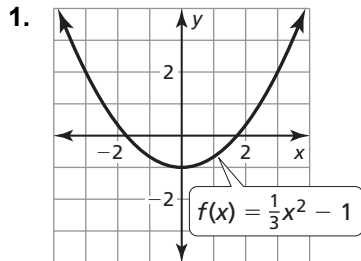


**1.1****Practice A**

In Exercises 1 and 2, identify the function family to which  $f$  belongs. Compare the graph of  $f$  to the graph of its parent function.



3. You purchased a computer for your business for \$800. Using straight-line depreciation, the amount of depreciation allowed for each year after the purchase is given by the function  $f(x) = 800 - 114.29x$ . What type of function can you use to model the data?

In Exercises 4–9, graph the function and its parent function. Then describe the transformation.

4.  $h(x) = x + 2$

5.  $f(x) = x - 3$

6.  $g(x) = x^2 + 2$

7.  $f(x) = (x - 1)^2$

8.  $h(x) = |x + 4|$

9.  $f(x) = 5$

In Exercises 10–15, graph the function and its parent function. Then describe the transformation.

10.  $f(x) = 3x$

11.  $g(x) = \frac{1}{2}x$

12.  $h(x) = 3x^2$

13.  $g(x) = \frac{1}{4}x^2$

14.  $h(x) = 2|x|$

15.  $f(x) = \frac{5}{2}x$

In Exercises 16–18, use a graphing calculator to graph the function and its parent function. Then describe the transformations.

16.  $f(x) = \frac{1}{3}x - 1$

17.  $h(x) = 2|x| - 3$

18.  $g(x) = \frac{5}{3}x^2 + 2$

19. In the same coordinate plane, sketch the graph of a parent absolute-value function and the graph of an absolute-value function that has no  $x$ -intercepts. Describe the transformation(s) of the parent function.