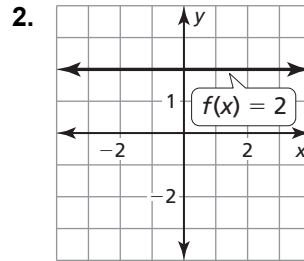
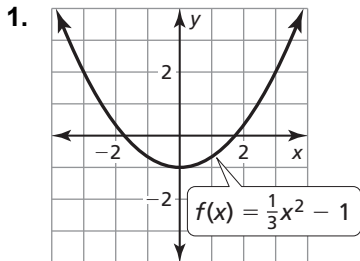


2.1 Practice A

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 $f(x) = 800 - 114.29x$. Identify the function family to which f belongs.

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.