

Identify each transformation from the parent function f(x) = x to g.

1.
$$g(x) = x + 2$$

$$2. g(x) = 3x$$

$$3. g(x) = -x$$

$$4. g(x) = -6x$$

5.
$$g(x) = (x - 5)$$

6.
$$g(x) = -3x + 2$$

Identify each transformation from the parent function $f(x) = x^2$ to g.

7.
$$g(x) = x^2 + 3$$

$$8. g(x) = -x^2$$

9.
$$g(x) = (6x^2)$$

$$con g(x) = 2x^2 - 6$$

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

12.
$$g(x) = (x-2)^2$$

Write the function for each graph described below.

13. the graph of
$$f(x) = x^2$$
 reflected across the x-axis

14. the graph of
$$f(x) = x^2$$
 reflected across the y-axis

15. the graph of
$$f(x) = x^4$$
 translated 5 units up

16. the graph of
$$f(x) = |x|$$
 stretched horizontally by a factor of 3

17. the graph of
$$f(x) = x^3$$
 translated 3 units down

18. the graph of
$$f(x) = x^2$$
 translated 4 units left