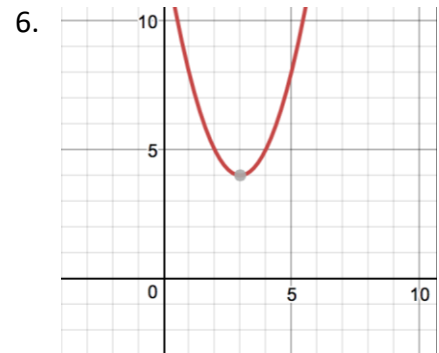
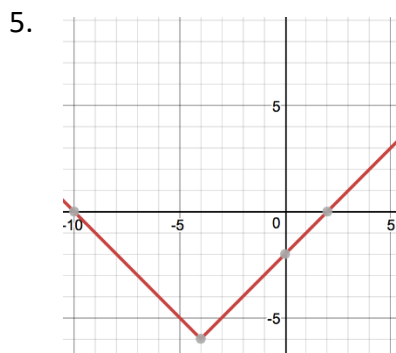
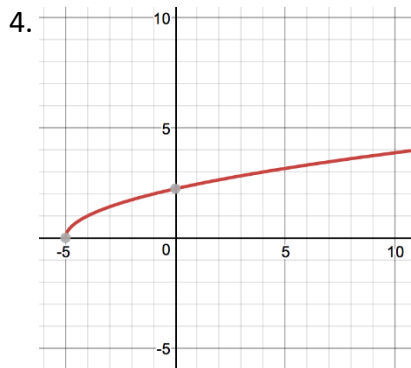
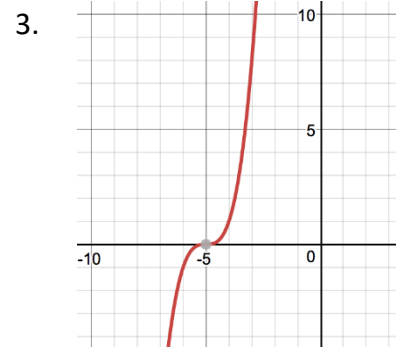
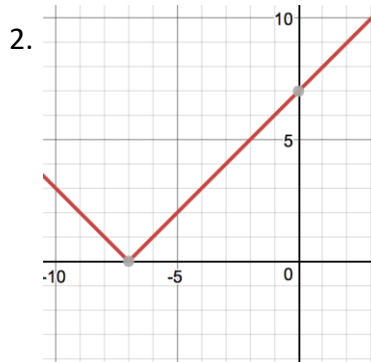
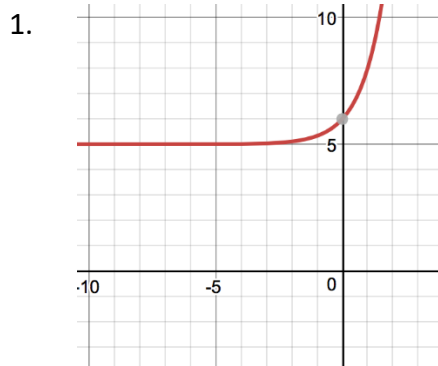


Name the parent function and the transformations for each graph or equation.



7. $f(x) = |x + 4|$

8. $f(x) = x^2 + 4$

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

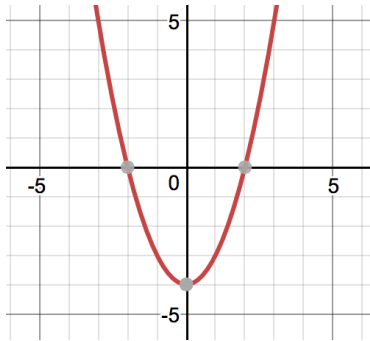
10. $f(x) = 3^x - 6$

11. $f(x) = |x + 4| - 6$

12. $f(x) = (x - 3)^2 + 4$

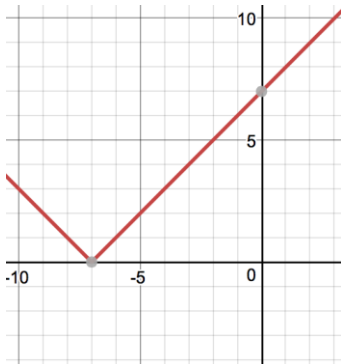
Choose the equation that matches the graph.

13.



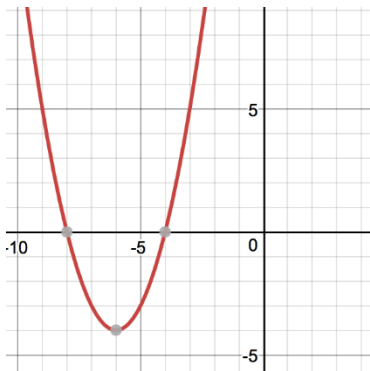
- a. $f(x) = (x - 4)^2$
- b. $f(x) = (x + 4)^2$
- c. $f(x) = x^2 - 4$
- d. $f(x) = x^2 + 4$

14.



- a. $f(x) = |x + 7|$
- b. $f(x) = (x + 7)^2$
- c. $f(x) = |x - 7|$
- d. $f(x) = x^2 - 7$

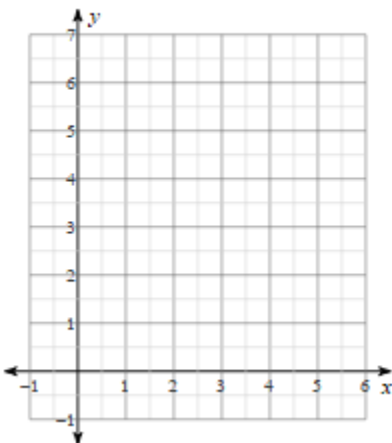
15.



- a. $f(x) = (x - 4)^2 - 6$
- b. $f(x) = (x + 6)^2 - 4$
- c. $f(x) = (x - 4)^2 + 6$
- d. $f(x) = (x - 6)^2 - 4$

Use your knowledge of transformations and parent functions to sketch a graph of the given function.

16. $f(x) = (x - 4)^2 + 1$



17. $y = \sqrt{x} - 3$

