

6-1 Functions

Name: _____

Time Start: _____ Finish: _____ Total Time = _____

Consider these four functions:

$$f(x) = 3x - 10$$

$$g(x) = x^2$$

$$h(x) = (x - 3)^2 + 1$$

$$w(x) = 2^x$$

1. $f(4) =$ _____

2. $g(-3) =$ _____

3. $h(5) =$ _____

4. $f(-10) =$ _____

5. $w(3) =$ _____

6. $h(-1) =$ _____

7. $g(10) =$ _____

8. $w(0) =$ _____

State if the given sets or graphs are functions or not functions.

To be a function, for each x value, there can only be one y value. Circle your answer

9. $\{(2,4), (3,4), (5,7)\}$

Yes No

10. $\{(-2,4), (-1,0), (5,7)\}$

Yes No

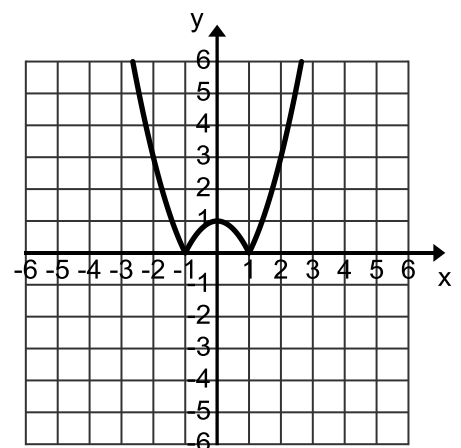
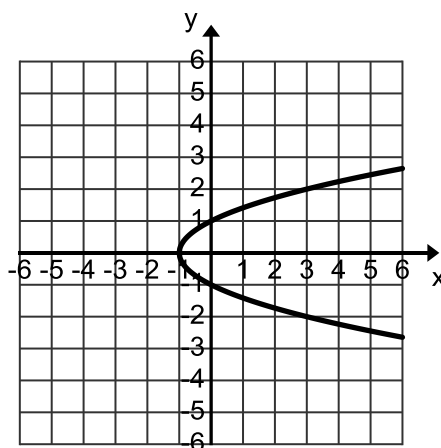
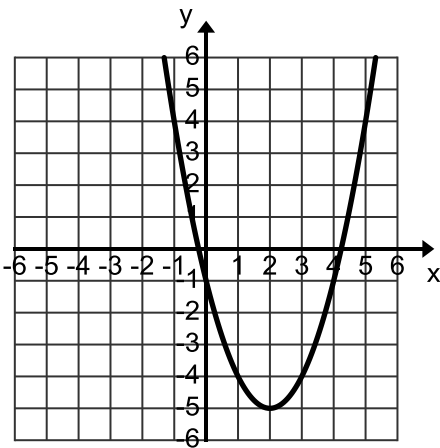
11. $\{(-1,4), (-1,0)\}$

Yes No

12. Yes No

13. Yes No

14. Yes No



15. Which of these is the zero of the function $f(x) = x^2 + 4x - 5$?

A. 2 B. -3 C. -5 D. 3

16. Which of these is the zero of the function $f(x) = x^2 - 5x + 6$?

A. -3 B. -2 C. 3 D. 4