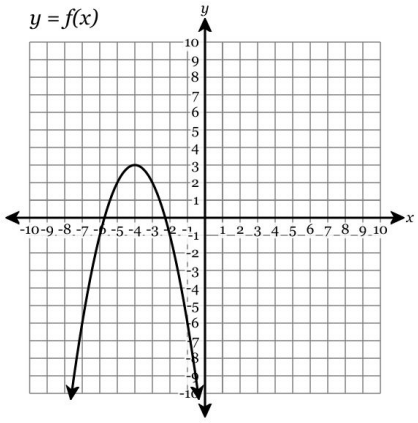
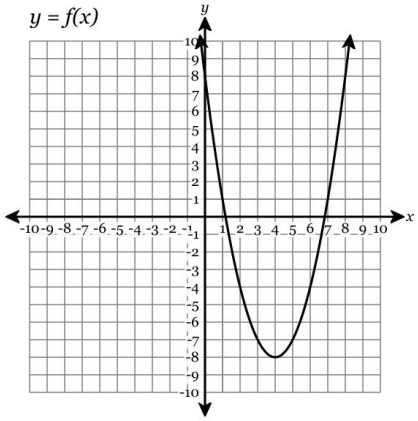
Name:_____ **CIRCLE ALL ANSWERS!!!** **Functions & Statistics**

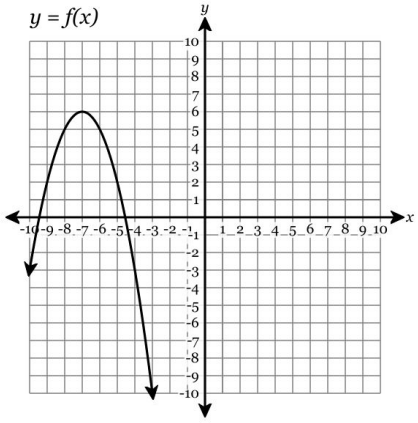
1. Find the value of $f(-3)$.



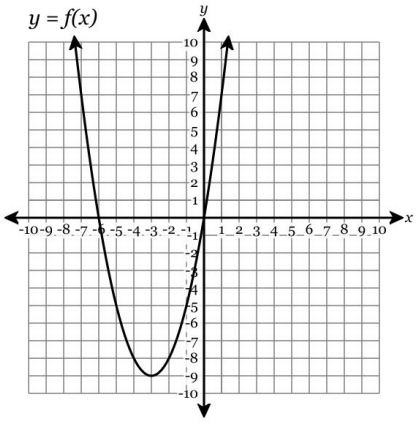
2. Find the value of $f(5)$.



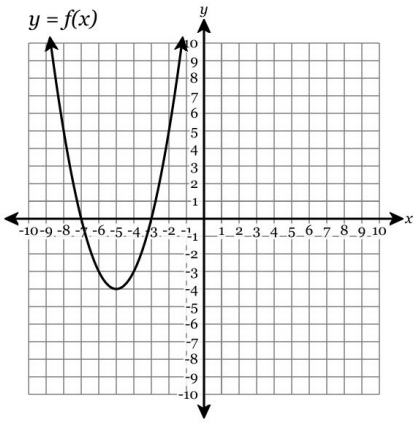
3. Find the value of $f(-8)$.



4. Find the value of $f(-2)$.



5. Find the value of $f(-5)$.



6. Given $g(x) = -2x - 4$, find $g(6)$.

7. Given $h(x) = -x - 1$, find $h(1)$.

8. Given $g(x) = -3x + 1$, find $g(-1)$.

9. Given $g(x) = 5x + 1$, find $g(4)$.

10. Given $g(x) = 2x - 2$, find $g(5)$.

11. Given $f(x) = -x^2 + 6x + 11$, find $f(-4)$

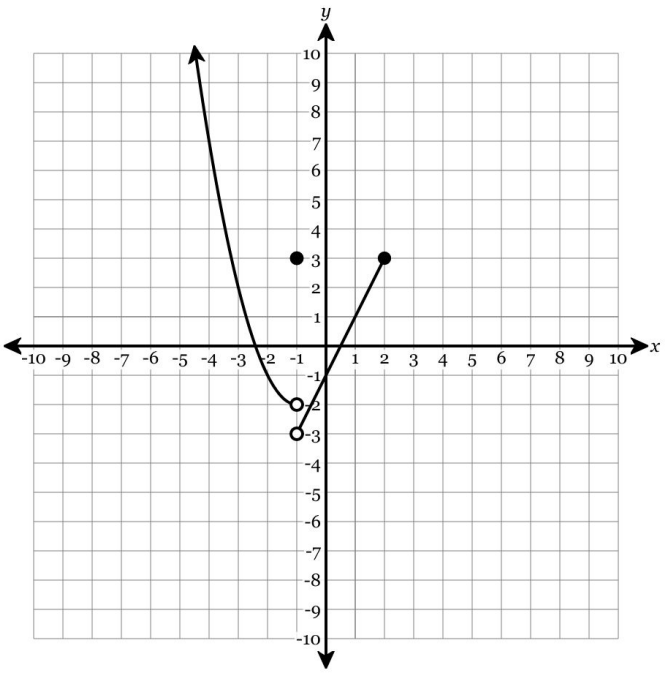
12. Given $f(x) = 2x^2 + x + 16$, find $f(-3)$

13. Given $f(x) = -x^2 - 6x + 13$, find $f(-6)$

14. Given $f(x) = 2x^2 + 8x - 20$, find $f(-10)$

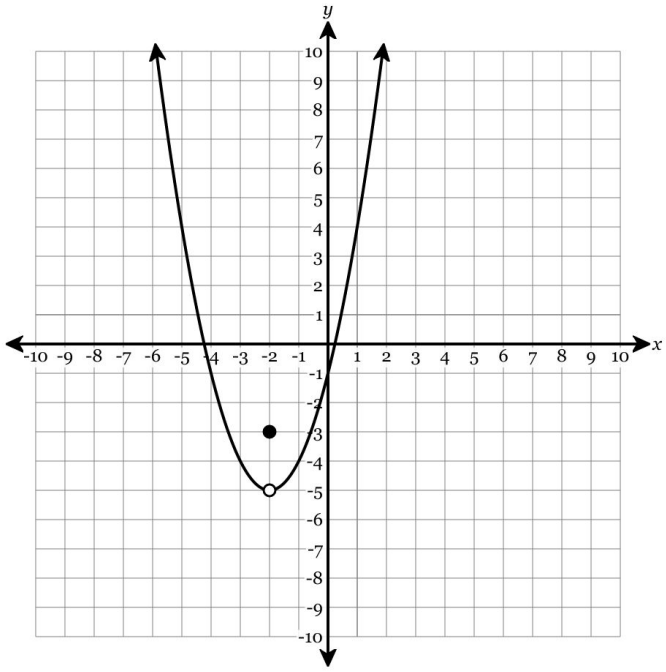
15. Given $f(x) = -4x^2 + x - 19$, find $f(-9)$

16. Evaluate the function graphically.



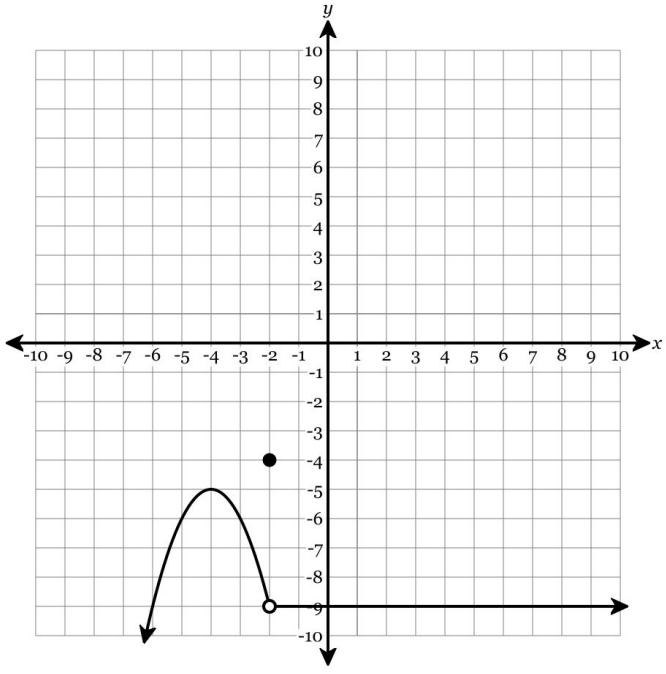
Find $f(0)$

17. Evaluate the function graphically.



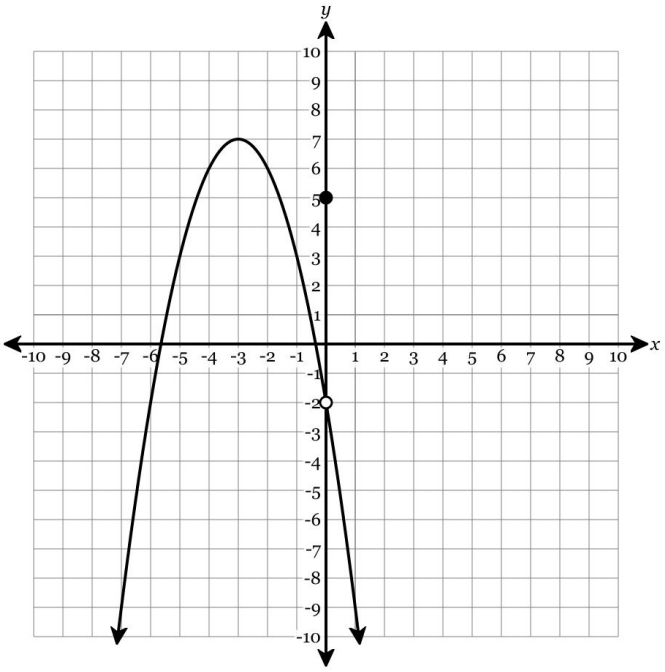
Find $f(-5)$

18. Evaluate the function graphically.



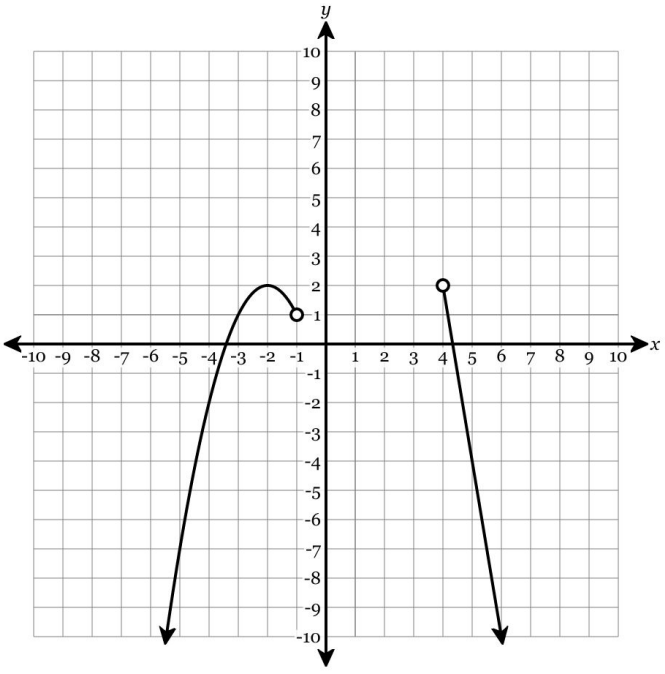
Find $f(-6)$

19. Evaluate the function graphically.



Find $f(0)$

20. Evaluate the function graphically.



Find $f(-3)$

21.

$$f(x) = \begin{cases} -(x-6)^2 + 5 & \text{for} \quad x \neq 3 \\ 3 & \text{for} \quad x = 3 \end{cases}$$

Find $f(3)$

22.

$$f(x) = \begin{cases} 3x - 9 & \text{for} \quad x \neq 5 \\ 5 & \text{for} \quad x = 5 \end{cases}$$

Find $f(5)$

23.

$$f(x) = \begin{cases} (x-2)^2 - 2 & \text{for} \quad x < 2 \\ 1 & \text{for} \quad x > 5 \end{cases}$$

Find $f(5)$

24.

$$f(x) = \begin{cases} -(x+2)^2 + 1 & \text{for} \quad x < 1 \\ x - 7 & \text{for} \quad 1 \leq x \leq 5 \\ -3 & \text{for} \quad x > 5 \end{cases}$$

Find $f(2)$

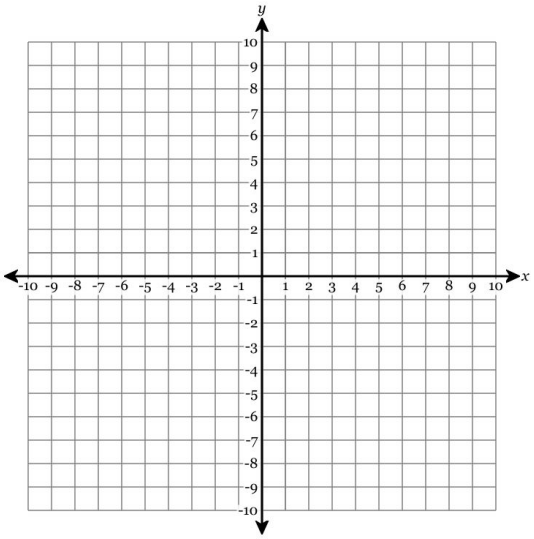
25.

$$f(x) = \begin{cases} -(x+4)^2 + 2 & \text{for} \quad x < -4 \\ x + 3 & \text{for} \quad x \geq 1 \end{cases}$$

Find $f(-2)$

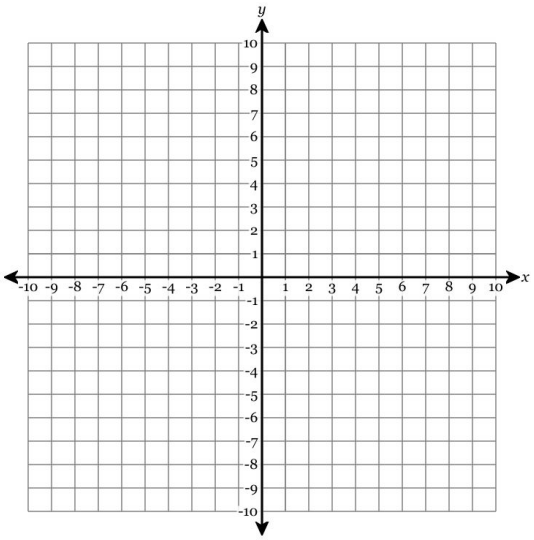
26. Graph the following function on the axes provided.

$$f(x) = \begin{cases} 3x - 5 & \text{for} \quad x \leq 1 \\ -x + 5 & \text{for} \quad x > 4 \end{cases}$$



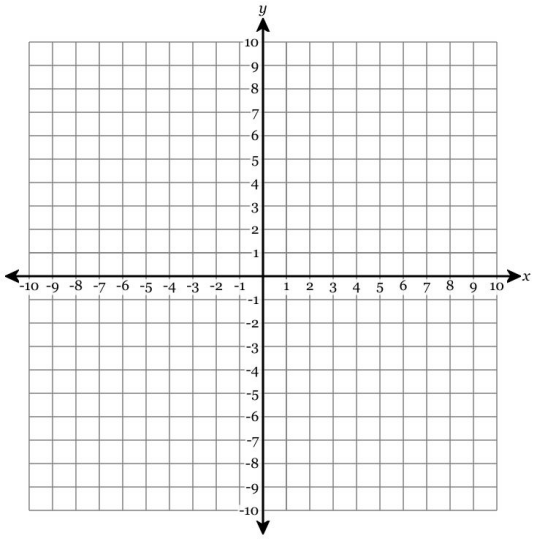
27. Graph the following function on the axes provided.

$$f(x) = \begin{cases} x - 6 & \text{for} \quad -2 \leq x < 1 \\ -3 & \text{for} \quad 1 < x < 6 \end{cases}$$



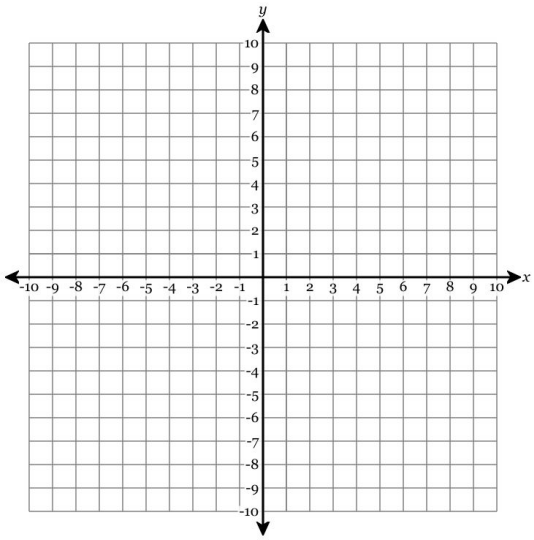
28. Graph the following function on the axes provided.

$$f(x) = \begin{cases} -x + 2 & \text{for} \quad -6 < x \leq 1 \\ x + 4 & \text{for} \quad 1 < x \leq 5 \end{cases}$$



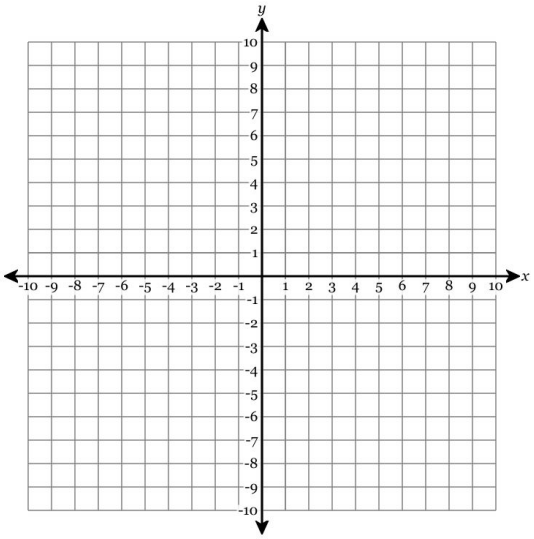
29. Graph the following function on the axes provided.

$$f(x) = \begin{cases} -2 & \text{for} \quad x \leq -2 \\ 2x - 10 & \text{for} \quad x > 2 \end{cases}$$



30. Graph the following function on the axes provided.

$$f(x) = \begin{cases} x - 2 & \text{for} \quad -6 < x < -2 \\ x - 6 & \text{for} \quad -2 < x < 3 \end{cases}$$



31. Determine the value of y, if x is -12.

$$y = |x| - 3$$

32. Determine the value of y, if x is 11.

$$y = |x| - 10$$

33. Determine the value of y, if x is -8.

$$y = |x + 11|$$

34. Determine the value of y, if x is -2.

$$y = |x - 12|$$

35. Determine the value of y, if x is -7.

$$y = |x| + 7$$

36. Determine the value of y, if x is -4.

$$y = x^2 + 9$$

37. Determine the value of y, if x is 8.

$$y = (x - 11)^2$$

38. Determine the value of y, if x is -3.

$$y = (x - 9)^2$$

39. Determine the value of y, if x is 4.

$$y = x^2 - 2$$

40. Determine the value of y, if x is -5.

$$y = x^2 - 7$$

41. Determine the value of y, if x is 64.

$$y = \sqrt{x} + 4$$

42. Determine the value of y, if x is 81.

$$y = \sqrt{x} - 6$$

43. Determine the value of y, if x is 38.

$$y = \sqrt{x + 11}$$

44. Determine the value of y, if x is 16.

$$y = \sqrt{x} - 12$$

45. Determine the value of y, if x is 30.

$$y = \sqrt{x + 6}$$

46. Determine the value of y, if x is 10.

$$y = \frac{39}{x + 3}$$

47. Determine the value of y, if x is 8.

$$y = \frac{25}{x - 13}$$

48. Determine the value of y, if x is -7.

$$y = \frac{16}{x + 15}$$

49. Determine the value of y, if x is 10.

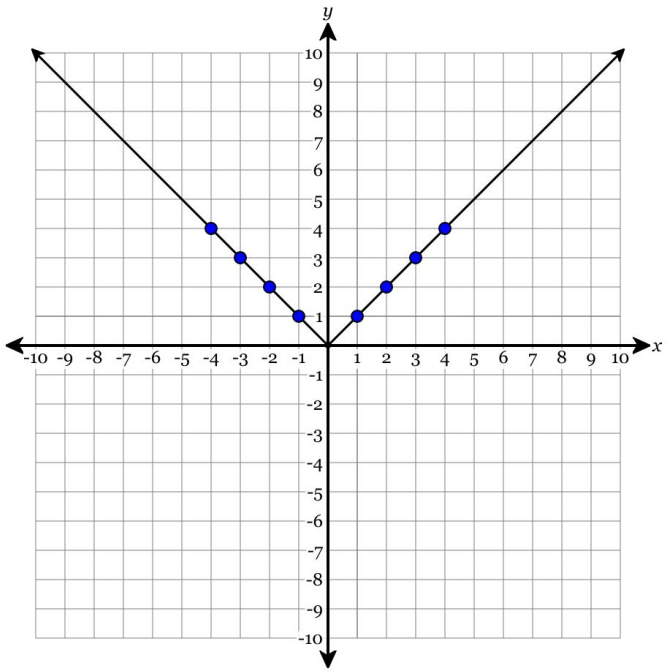
$$y = \frac{25}{x - 15}$$

50. Determine the value of y, if x is 10.

$$y = \frac{36}{x - 22}$$

51. Graph the equation shown below by transforming the given graph of the parent function.

$$y = |x + 3| + 4$$



52. Graph the equation shown below by transforming the given graph of the parent function.

$$y = \sqrt{x + 4}$$