

Name _____

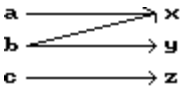
To receive full credit for the assignment you must attach extra sheets of paper to the packet and show your work (write the steps to arrive at each answer).

Determine whether the given point is a solution of the equation.

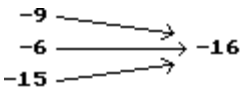
1) $-11x + 6y = 50$; $(-4, 1)$ 1) _____
A) No B) Yes

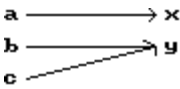
2) $5x - 2y = 26$; $(4, 3)$ 2) _____
A) No B) Yes

Is the following correspondence a function?

3) 3) _____

A) Yes B) No

4) Domain: All students attending the University of Ohio 4) _____
Correspondence: Each student's teachers
Range: A set of teachers
A) No B) Yes

5) 5) _____

A) Yes B) No

6) 6) _____

A) Yes B) No

Find the function value.

7) Find $f(3)$ when $f(x) = -4$.

A) -4

B) 4

C) -12

D) 3

7) _____

8) Find $f(2a)$ when $f(x) = 8x^2 + 5x$.

A) $32a^2 + 10a$

B) $8a^2 + 10a$

C) $16a^2 + 10a$

D) $32a^2 + 5a$

8) _____

9) Find $f(4)$ when $f(x) = |x + 1|$.

A) 4

B) -1

C) -5

D) 5

9) _____

10) Find $f(-3)$ when $f(x) = x^2 - 3x + 7$.

A) 7

B) 25

C) 11

D) -7

10) _____

11) Find $f(-7)$ when $f(x) = -5x - 29$.

A) 145

B) -29

C) 4

D) 6

11) _____

Solve the problem.

12) The function $P(d) = 1 + \frac{d}{33}$ gives the pressure, in atmospheres (atm), at a depth d feet in the sea.

12) _____

Find the pressure at 35 feet.

A) $\frac{12}{11}$ atm

B) $\frac{68}{33}$ atm

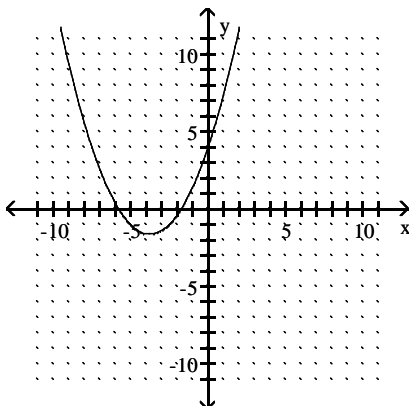
C) $\frac{2}{33}$ atm

D) $\frac{35}{33}$ atm

Determine whether the graph is the graph of a function.

13)

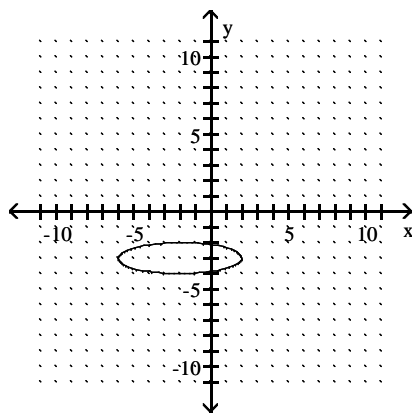
13) _____



A) Function

B) Not a function

14)

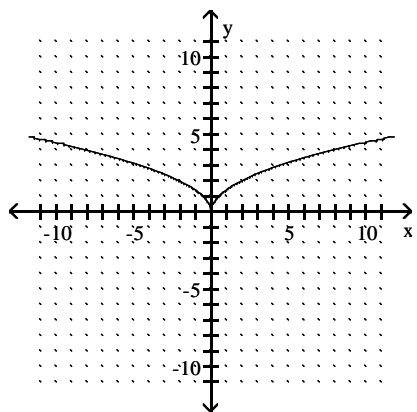


A) Not a function

B) Function

14) _____

15)

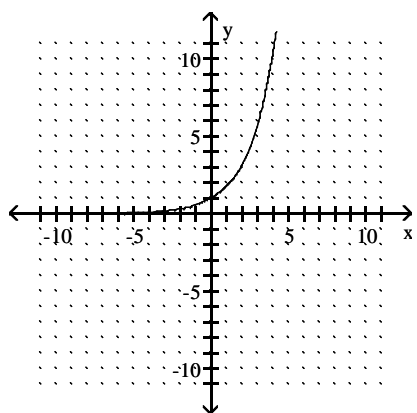


A) Not a function

B) Function

15) _____

16)

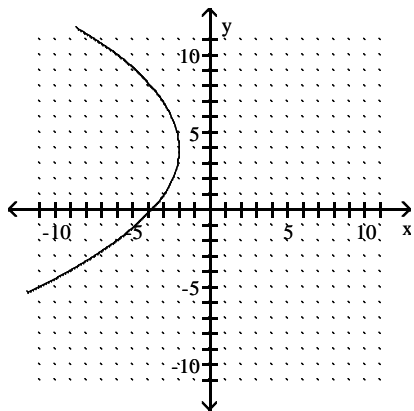


A) Function

B) Not a function

16) _____

17)

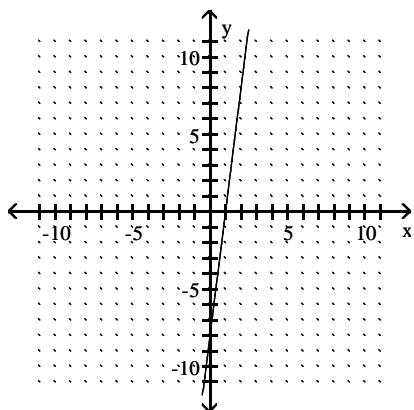


A) Not a function

B) Function

17) _____

18)



A) Not a function

B) Function

18) _____

Find the domain.

19) $f(x) = 6x + 9$

- A) All real numbers
- B) $\{x \mid x \text{ is a real number and } x \neq -0.44444444\}$
- C) $\{x \mid x \text{ is a real number and } x \neq -4\}$
- D) $\{x \mid x \text{ is a real number and } x \neq -2.25\}$

19) _____

20) $f(x) = \frac{-1}{-6 - x}$

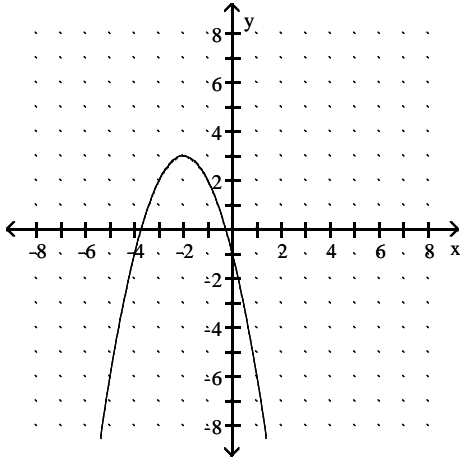
- A) $\{x \mid x \text{ is a real number and } x \neq -6\}$
- B) $\{x \mid x \text{ is a real number and } x \neq 1\}$
- C) $\{x \mid x \text{ is a real number and } x \neq -1\}$
- D) $\{x \mid x \text{ is a real number and } x \neq 6\}$

20) _____

The graph of a function f is provided. Determine the requested function value.

21) $f(-3)$

21) _____



A) -6

B) 2

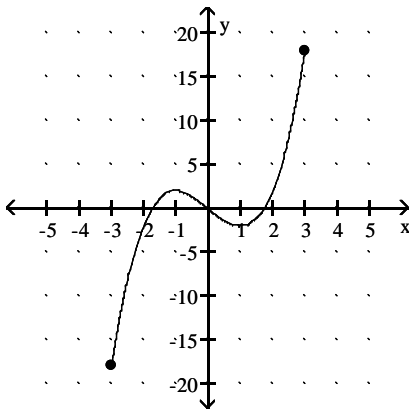
C) -4

D) 4

For the function represented in the graph, determine the domain or range, as requested.

22) Find the domain.

22) _____



A) all real numbers

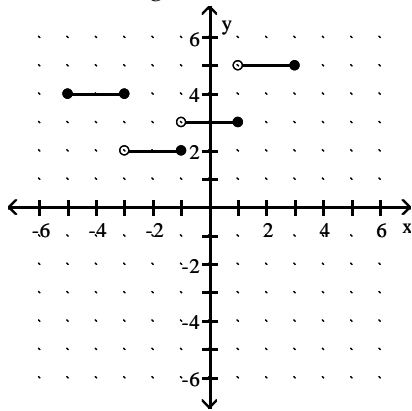
B) $[-5, 5]$

C) $[-3, 3]$

D) $[-18, 18]$

23) Find the range.

23) _____



A) $\{-5, -3, -1, 1, 3\}$

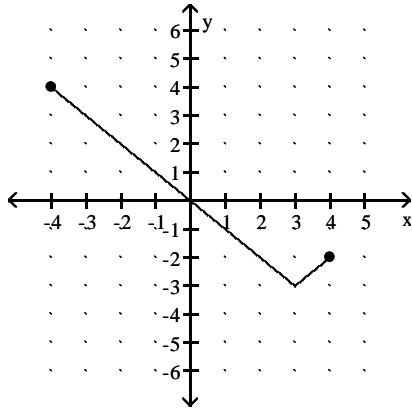
B) $\{2, 3, 4, 5\}$

C) $[2, 5]$

D) $[-5, 3]$

24) Find the range.

24) _____



A) $[-3, 4]$

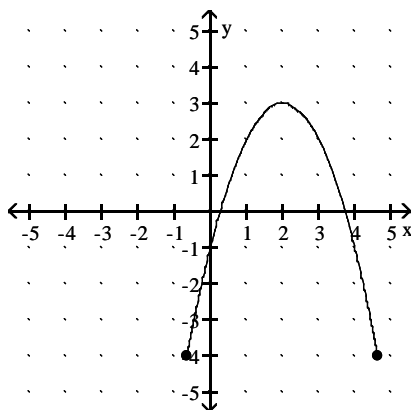
B) $\{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$

C) $[4, -2]$

D) $[-3, 3]$

25) Find the range.

25) _____



A) $[-2, 2]$

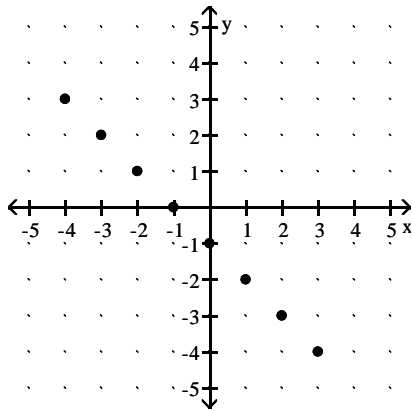
B) $[-5, 5]$

C) $[-4, 3]$

D) $[-0.65, 4.65]$

26) Find the domain.

26) _____



A) $[-4, 4]$

B) $[-2, 2]$

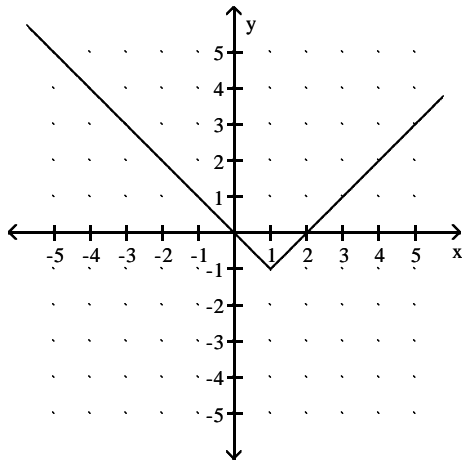
C) $\{-4, -3, -2, -1, 0, 1, 2, 3\}$

D) $\{-5, -4, -3, -2, -1, 0, 1, 2, 3\}$

A function f is depicted in the graph. Find any input values that produce the indicated output.

27) $f(x) = 2$

27) _____



A) $x = -2$

B) $x = 2$ and $x = -4$

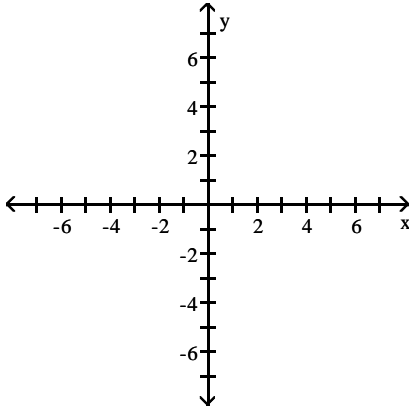
C) $x = 2$ and $x = 0$

D) $x = -2$ and $x = 4$

Show that the two ordered pairs are solutions to the given equation. Then use the graph of the two points to determine another solution. Answers may vary.

28) $y = \frac{1}{2}x - 3$; (2, -2), (-4, -5)

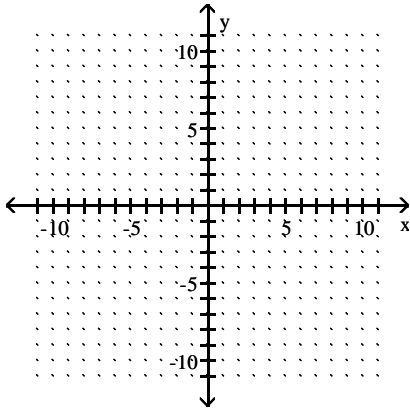
28) _____



Graph the linear equation.

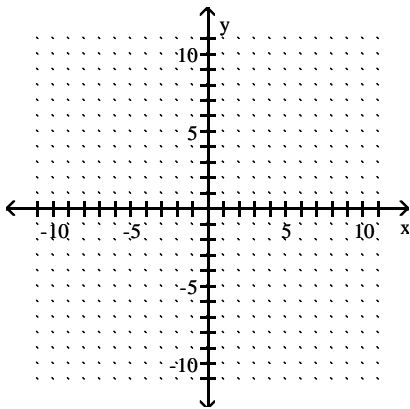
29) $4y - 8x = -8$

29) _____



30) $y = \frac{4}{3}x - 1$

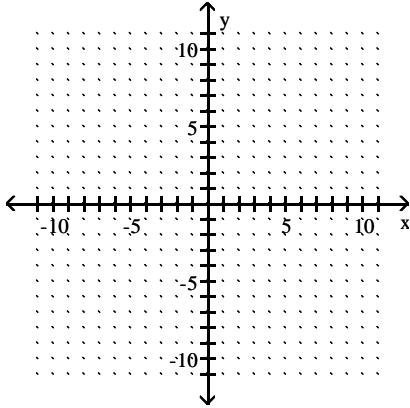
30) _____



Graph.

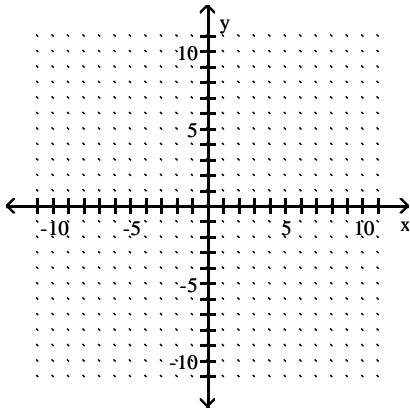
31) $y = x^2 - 5$

31) _____



32) $y = |x| + 6$

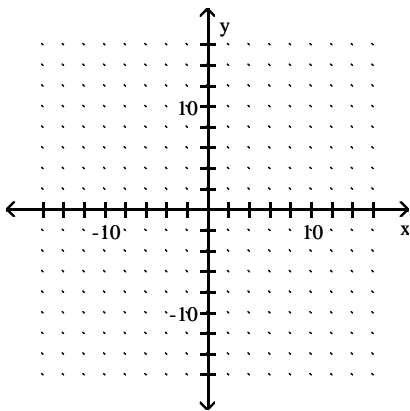
32) _____



Graph the function.

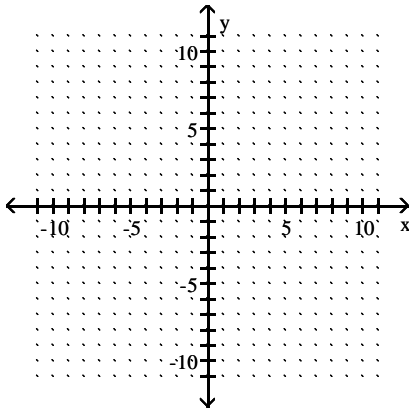
33) $f(x) = -1 - x^2$

33) _____



34) $f(x) = x^3 + 1$

34) _____



Find the domain.

35) $f(x) = \frac{1}{|85 - x|}$

35) _____

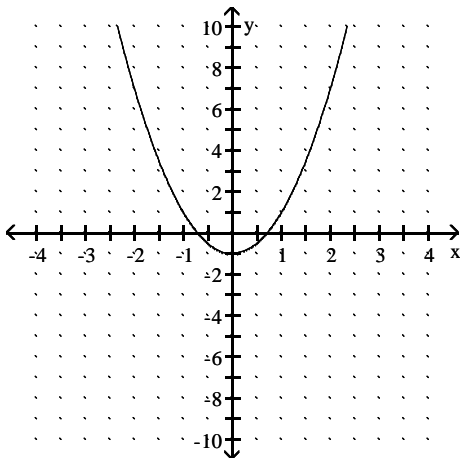
36) $f(x) = \frac{-5}{x - 2}$

36) _____

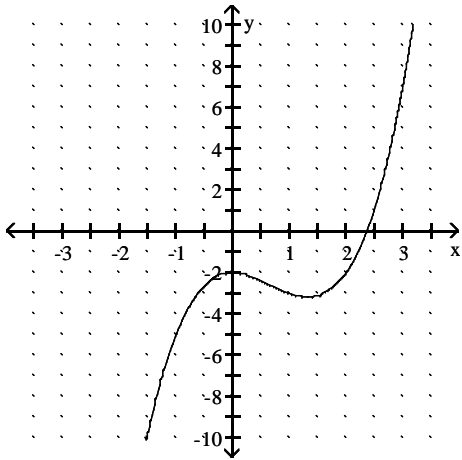
Find the function value.

37) $f(1)$

37) _____



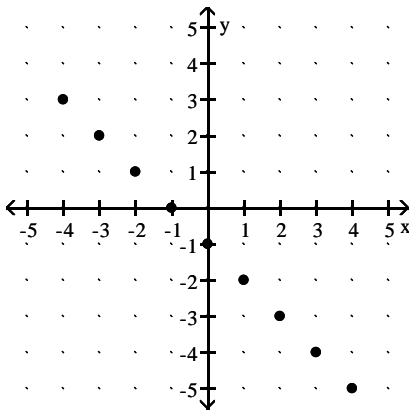
38) $f(1)$



38) _____

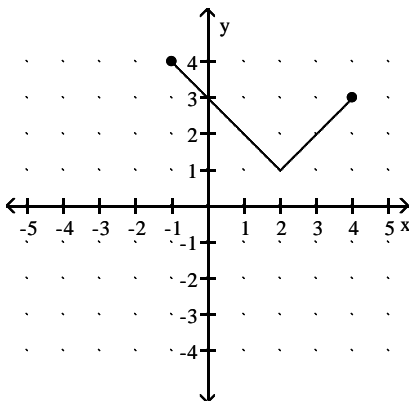
For the function represented in the graph, determine the domain or range, as requested.

39) Find the range.



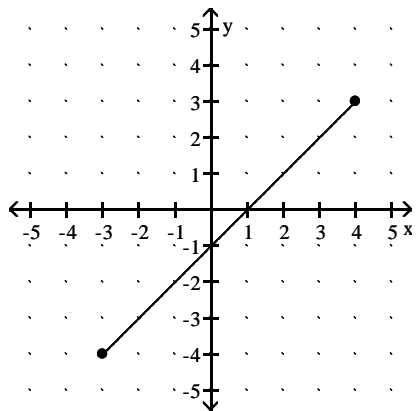
39) _____

40) Find the domain.



40) _____

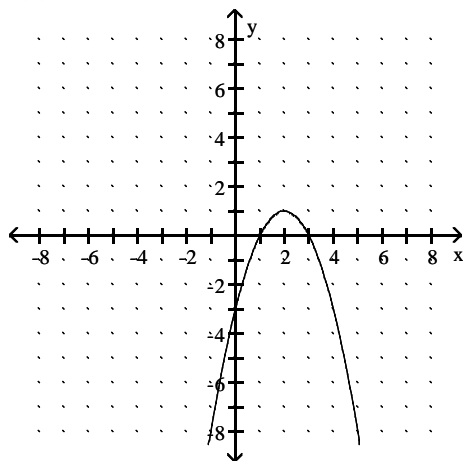
41) Find the domain.



41) _____

A function f is depicted in the graph. Find any input values that produce the indicated output.

42) $f(x) = 0$



42) _____