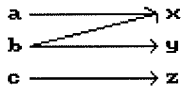
Quiz 2

Name_____

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

Is the following correspondence a function?

1) 1) _____

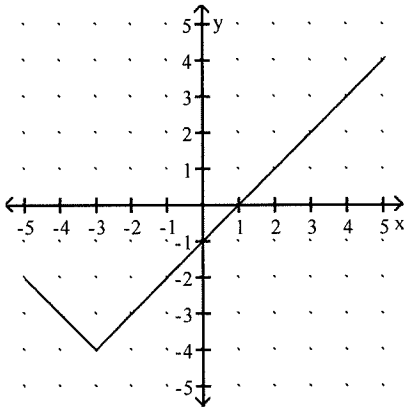


A) No B) Yes

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

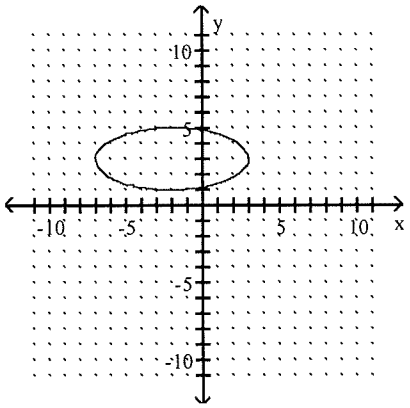
The graph of a function f is provided. Determine the requested function value.

2) f(−2) 2) _____



Determine whether the graph is the graph of a function.

3) 3) _____



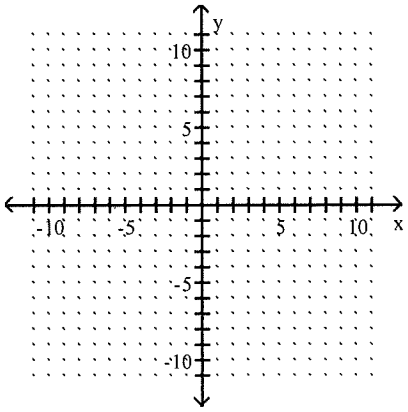
Find the function value.

4) Find f(2) when $f(x) = x^2 + 2x + 6$. 4) _____

5) Find f(a + 4) when $f(x) = x^2 + 5$. 5) _____

Graph.

6) $f(x) = 2x - 6$ 6) _____



Find the slope of the line containing the two given points.

7) (9, −2) and (−8, 6) 7) _____

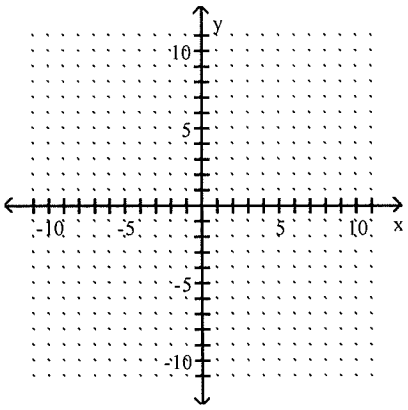
8) (−2, 2) and (−3, 2) 8) _____

Find a linear function whose graph has the given slope and y-intercept.

9) Slope $\frac{9}{2}$, y-intercept (0, −14) 9) _____

Find the y-intercept and slope for the graph of the equation. Then graph the equation.

10) $y = 7$ 10) _____



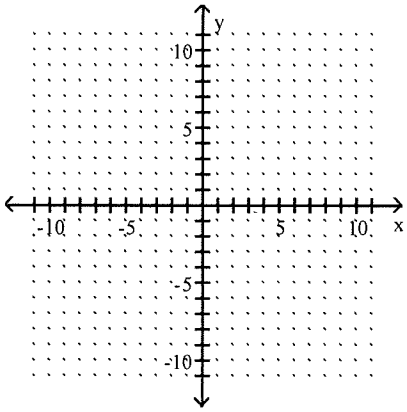
Find the slope of the line.

11) $2x + 5y = 19$ 11) _____

12) $6 - 12x = 10 + 9x$ 12) _____

Graph the linear equation.

13) $x = -3$ 13) _____



Determine whether the graphs of the equations are parallel lines, perpendicular lines, or neither.

14) $3x - 6y = 10$ 14) _____
$18x + 9y = 10$

MULTIPLE CHOICE. Choose the one alternative that best completes the statement or answers the question.

15) $y + 16 = 3x$ 15) _____
$x - y = 4$
A) Perpendicular B) Parallel C) Neither

SHORT ANSWER. Write the word or phrase that best completes each statement or answers the question.

16) $12x + 4y = 16$ 16) _____
$27x + 9y = 40$

Find an equation for the described linear function.

17) Through $\left(0, \frac{2}{5}\right)$ and parallel to $6x + 9y = 9$ 17) _____

18) Through $(0, -8)$ and perpendicular to $y = 2x + 8$ 18) _____

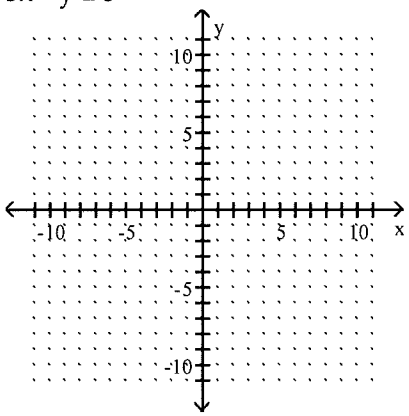
19) Through $(-2, -6)$, perpendicular to $9x + 4y = 6$ 19) _____

Determine whether the equation is linear.

20) $-81x + 42y = 0$ 20) _____

Graph the linear inequality in two variables.

21) $3x + y \leq 3$ 21) _____



Write the slope–intercept form of the equation for the line passing through the given pair of points.

22) (6, −4) and (0, 3) 22) _____

23) (−10, −8) and (−6, −8) 23) _____

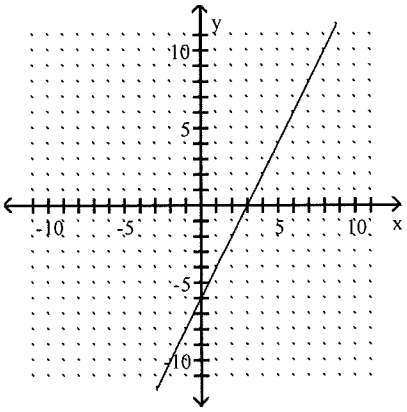
24) (−2, −10) and (−2, −1) 24) _____

Write an equation of the line with the given slope and y–intercept.

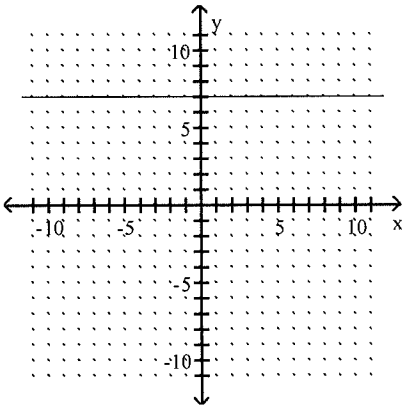
25) Undefined slope; (−10, 9) 25) _____

Answer Key
Testname: UNTITLED1

1) A
2) −3
3) Not a function
4) 14
5) $a^2 + 8a + 21$
6)

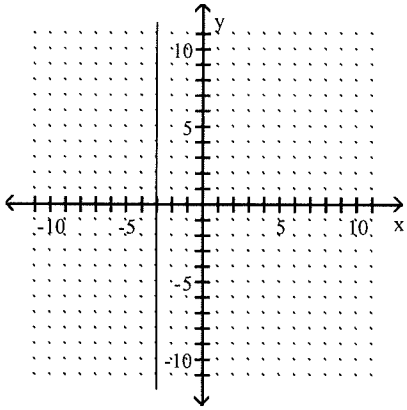


7) $-\frac{8}{17}$
8) 0
9) $f(x) = \frac{9}{2}x - 14$
10) (0, 7); slope: 0

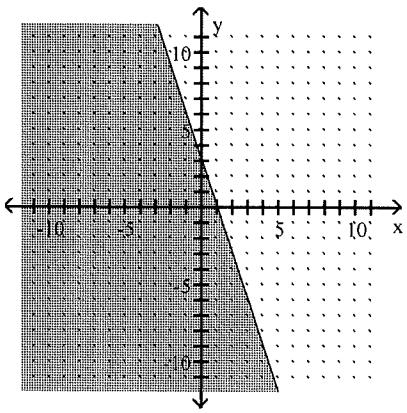


11) $-\frac{2}{5}$
12) Undefined

13)



14) Perpendicular
15) C
16) Parallel
17) $y = -\frac{2}{3}x + \frac{2}{5}$
18) $y = -\frac{1}{2}x - 8$
19) $y = \frac{4}{9}x - \frac{46}{9}$
20) Linear
21)



22) $y = -\frac{7}{6}x + 3$
23) $y = -8$
24) $x = -2$
25) $x = -10$