

Determine the quadrant or axis in which the point is located.

1) $(-7, -17)$

1) _____

2) $(4, -4)$

2) _____

3) $(0, 5)$

3) _____

4) $(-7, 0)$

4) _____

Decide whether or not the ordered pair is a solution to the equation.

5) $-8x + 6y = -16$; $(5, 4)$

5) _____

Find the intercepts for the equation.

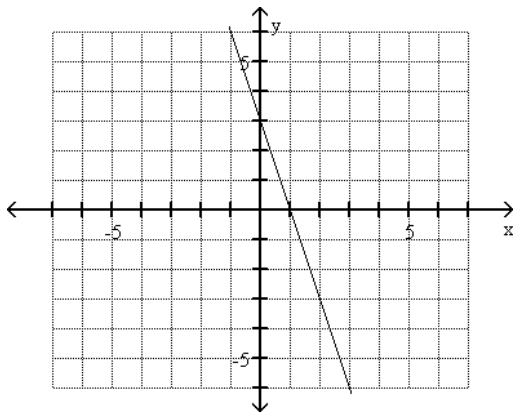
6) $-2x + 3y = 6$

6) _____

Find the coordinates of the y-intercept and the coordinates of all x-intercepts.

7)

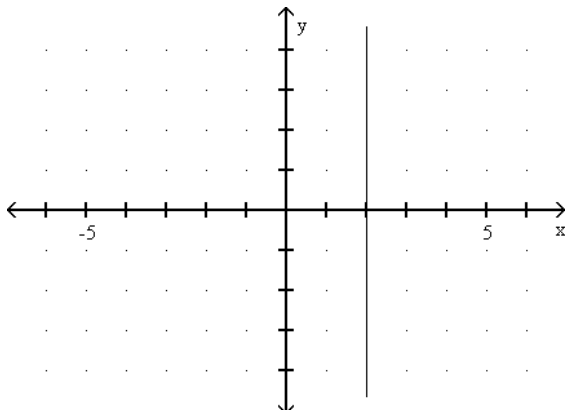
7) _____



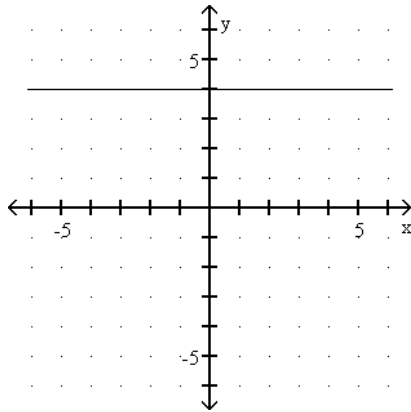
Write an equation for the graph.

8)

8) _____



9)

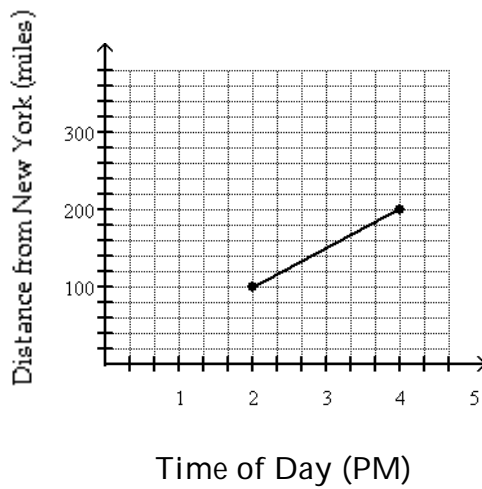


9) _____

Solve the problem.

10) The following graph shows data for a recent train ride from New York to Toronto. At what rate did the train travel?

10) _____



For problems 11-14, Find the slope of the line. If the slope is undefined, state so.

11) $y = 1$

11) _____

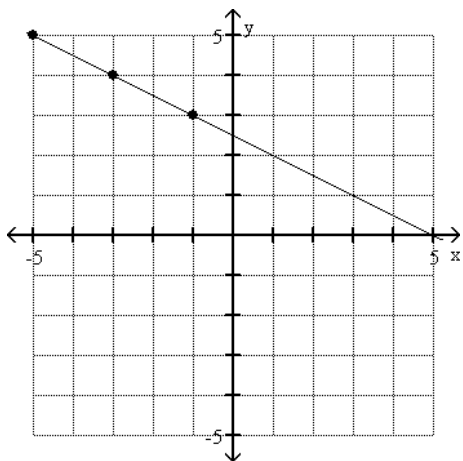
12) $x = -3$

12) _____

13) $(5, 5)$ and $(10, -2)$

13) _____

14)



14) _____

Find the slope and the y-intercept of the line.

15) $-4x + y = 12$

15) _____

Find the slope-intercept equation for the line with the indicated slope and y-intercept.

16) Slope $-\frac{2}{5}$; y-intercept $(0, 5)$

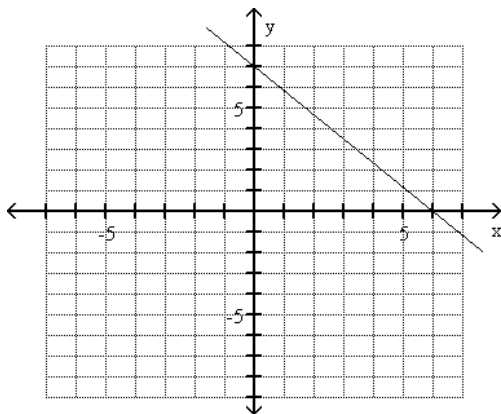
16) _____

17) Slope 6; y-intercept $(0, 0)$

17) _____

Find the equation for the graph.

18)



18) _____

19) Suppose m varies directly as p^2 and $m = 12$ when $p = 5$. Find m when $p = 3$. Find the equation that would be used to solve.

19) _____

A) $\frac{12}{m} = \frac{9}{25}$

B) $\frac{12}{m} = \frac{3}{5}$

C) $\frac{12}{m} = \frac{25}{9}$

D) $\frac{12}{m} = \frac{5}{3}$

20) Find an equation of variation when y varies inversely as x. If x is 18 when y is 5, then find x when y is 9. 20) _____

A) $\frac{5}{9} = \frac{18}{x}$

B) $\frac{9}{5} = \frac{x}{18}$

C) $\frac{5}{9} = \frac{x}{18}$

D) $\frac{9}{x} = \frac{18}{5}$

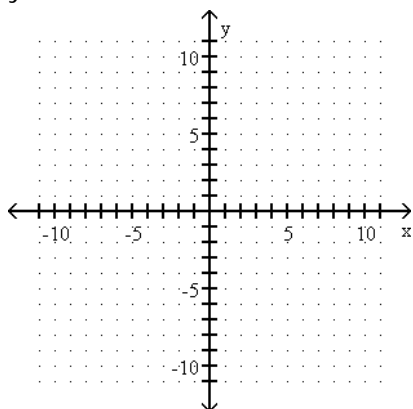
Solve.

21) The weight that a horizontal beam can support varies inversely as the length of the beam. Suppose that a 10-m beam can support 210 kg. How many kilograms can a 5-m beam support? 21) _____

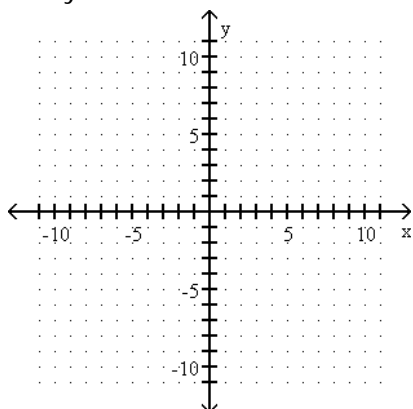
22) The weight of a liquid varies directly as its volume V. If the weight of the liquid in a cubical container whose volume is 27 cm³ is 81 g, find the weight of the liquid in a cubical container whose volume is 125 cm³. 22) _____

23 - 24 Graph the equation by making a chart and plotting points.

23) $y = 3x - 6$ 23) _____



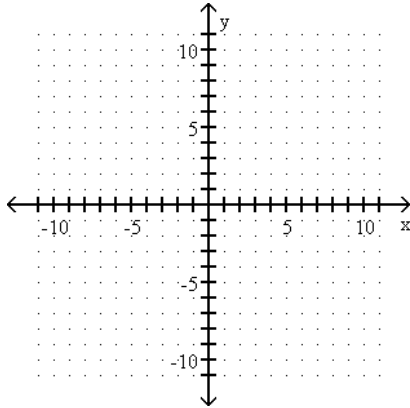
24) $3x - y = -6$ 24) _____



25 - 26 Find the x- and y-intercepts for the equation. Then graph the equation.

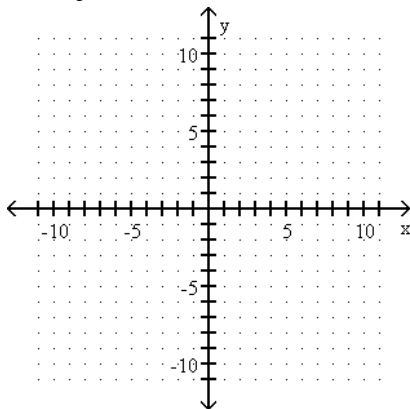
25) $-2x - 12y = 12$

25) _____



26) $-x + 3y = 9$

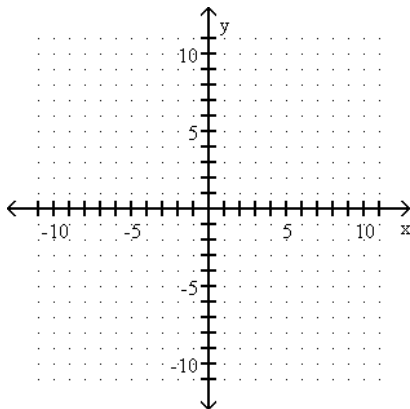
26) _____



27 - 28 Graph the linear equation using y-intercept and slope.

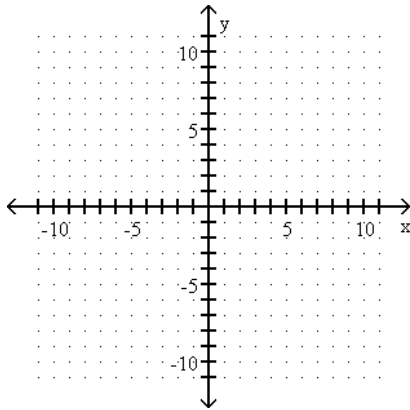
27) $y = \frac{3}{2}x - 1$

27) _____



28) $y = \frac{1}{2}x + 3$

28) _____

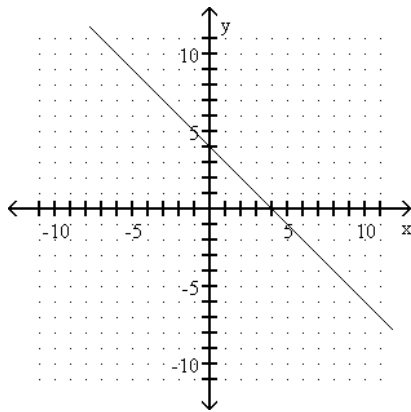


29 - 30 Match the equation to the correct graph.

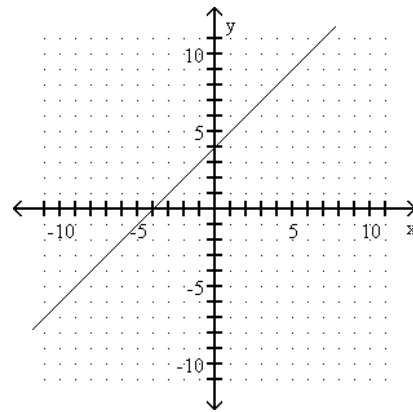
29) $x + y = 4$

29) _____

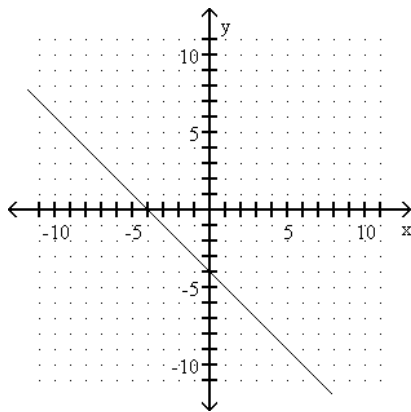
A)



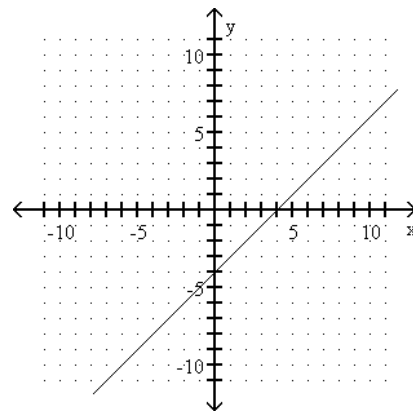
B)



C)

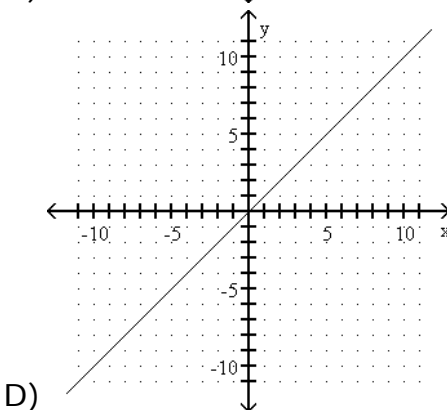
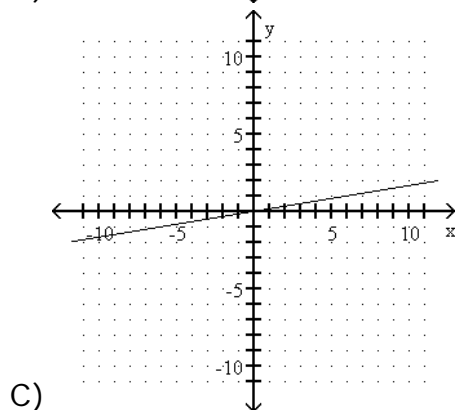
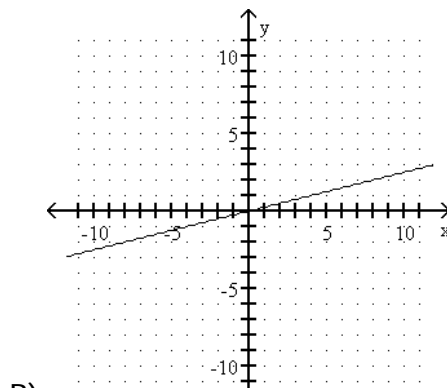
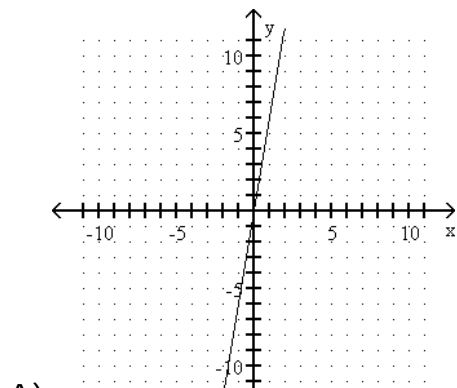


D)



30) $y = \frac{1}{6}x$

30) _____

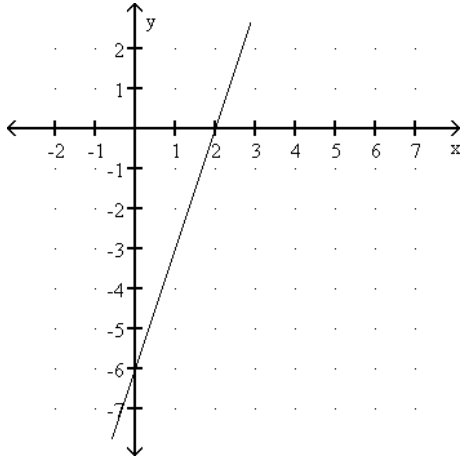


31) Answers to Chapter 3 Practice Test

31) _____

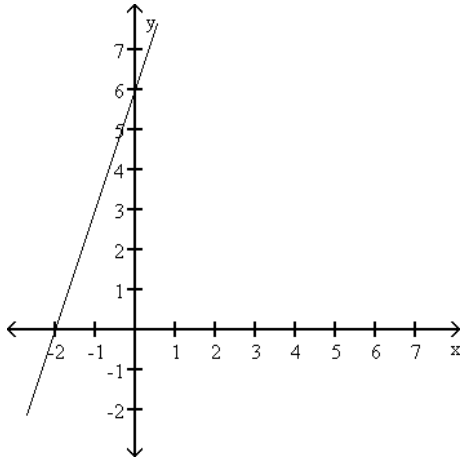
- | | |
|---|--|
| 1. Quadrant III | 2. Quadrant IV |
| 3. Y-axis | 4. X-axis |
| 5. Yes | 6. Y-Intercept (0,2), X-Intercept (-3,0) |
| 7. Y-Intercept (0,3), X-Intercept (1,0) | 8. $x=2$ |
| 9. $y=4$ | 10. 50 miles per hour |
| 11. 0 | 12.. undefined |
| 13. $-\frac{7}{5}$ | 14. $-\frac{1}{2}$ |
| 15. 4; (0,12) | 16. $y=-\frac{2}{5}x + 5$ |
| 17. $y=6x$ | 18. $y=-\frac{7}{6}x + 7$ |
| 19. C | 20. C |
| 21. 420 kg | 22. 375 g |

23.

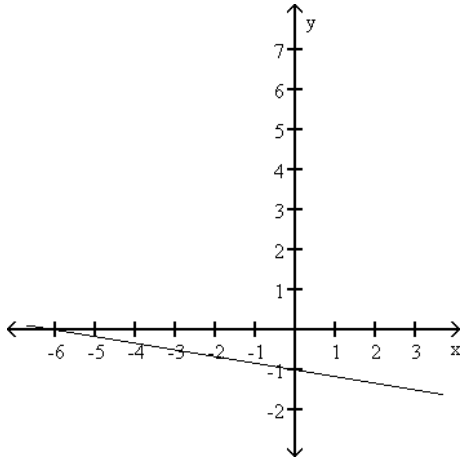


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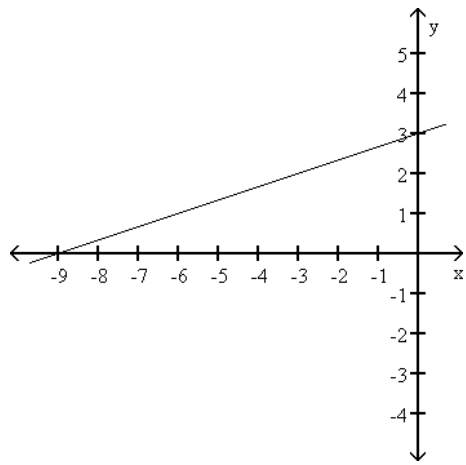
24.



25.

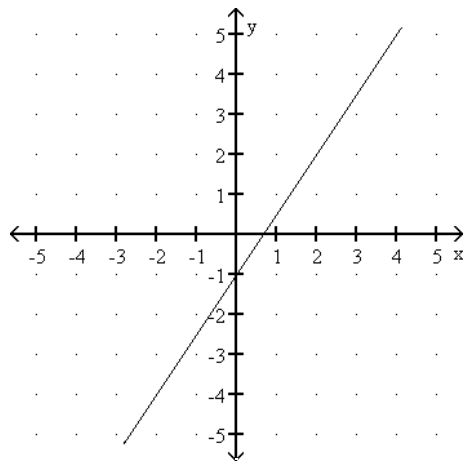


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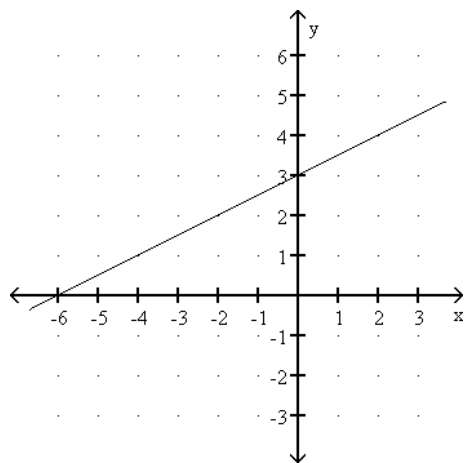


31)

27.



28.



29. A

30. C