

**LESSON
3.3****Practice B**

For use with the lesson "Graph Using Intercepts"

Find the x-intercept and the y-intercept of the graph of the equation.

1. $x + y = 1$

2. $x - y = -5$

3. $6x - 3y = -3$

4. $5x + 10y = 30$

5. $9y - 5x = 20$

6. $8x - 2y = 16$

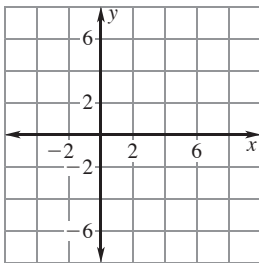
7. $7x + 8y = 18$

8. $2y - 12x = -6$

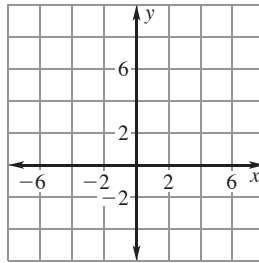
9. $2x - 0.5y = 8$

Draw the line that has the given intercepts.

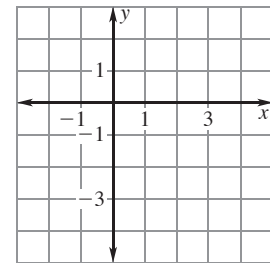
10. x-intercept: 5
y-intercept: 4



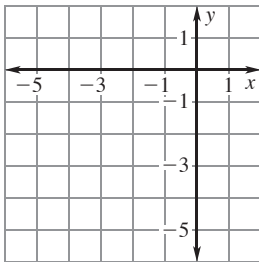
11. x-intercept: -1
y-intercept: 6



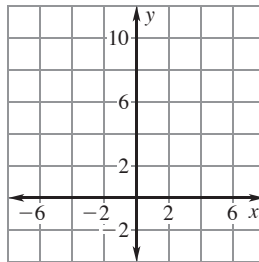
12. x-intercept: 2
y-intercept: -3

**Graph the equation. Label the points where the line crosses the axes.**

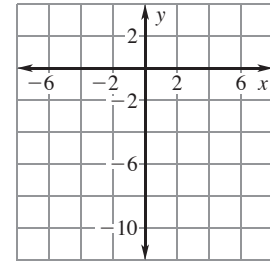
13. $y = -x - 4$



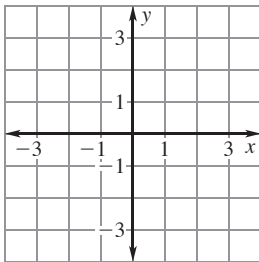
14. $y = 6 + 3x$



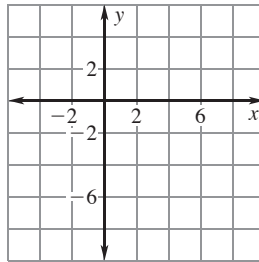
15. $y = 8x - 7$



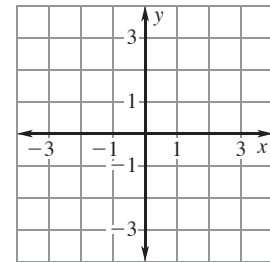
16. $y = 1 - 3x$



17. $7x - 7y = 42$



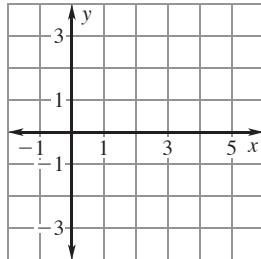
18. $3y + 2x = -5$



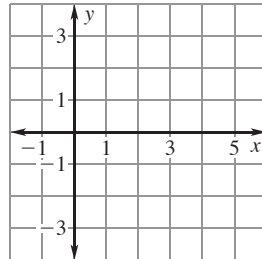
LESSON
3.3

Practice B *continued*
For use with the lesson "Graph Using Intercepts"

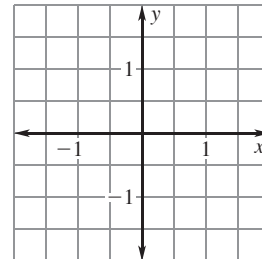
19. $4x - 9y = 16$



20. $y = 0.5x - 2$



21. $y = 3x + 0.2$



Match the equation with its intercepts.

22. $7y = 28 - 4x$

- A.** x -intercept: 4
 y -intercept: -7

23. $7x = 4y + 28$

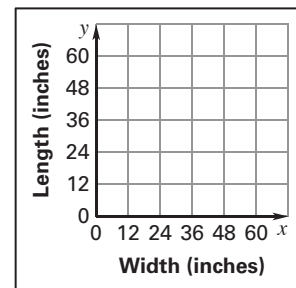
- B.** x -intercept: -4
 y -intercept: 7

24. $4y = 7x + 28$

- C.** x -intercept: 7
 y -intercept: 4

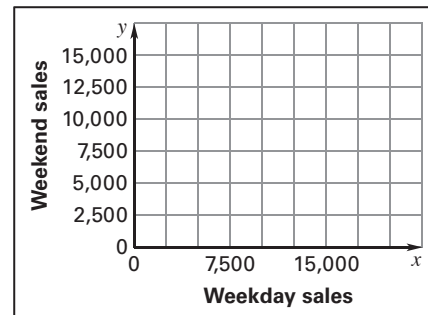
25. **Rabbit Hutch** The bottom of a rabbit cage is a rectangle with a perimeter of 118 inches. Let x be the cage's width (in inches) and let y be its length (in inches).

- Write an equation for the perimeter.
- Find the intercepts of the graph of the equation you wrote. Then graph the equation.



26. **Home and Garden Show** Admission to a home and garden show costs \$7 per person during the week and \$9 per person on the weekend. During one week of the show, a total of \$142,506 was paid in admissions. This situation can be represented by the equation $7x + 9y = 142,506$ where x is the number of tickets sold during the week and y is the number of tickets sold on the weekend.

- Find the intercepts of the graph of the equation. Graph the equation.
- Give three possibilities for the number of each kind of ticket that could have been sold for the week.



27. **Burning Calories** A man burns 10 calories per minute mountain biking and 7.5 calories per minute in-line skating. His goal is to burn approximately 420 calories daily. This situation can be represented by the equation $10x + 7.5y = 420$ where x is the number of minutes spent mountain biking and y is the number of minutes spent in-line skating.

- Find the intercepts of the graph of the equation. Graph the equation.
- What do the intercepts mean in this situation?
- What are three possible numbers of minutes of biking and skating the man could do to reach his goal?

