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Practice

For use with pages 391–397

Tell whether the ordered pair is a solution of the equation.

1. $y = 5x$; $(15, -3)$

2. $y = 4x + 9$; $(-2, 1)$

3. $4x - 5y = 1$; $(4, 3)$

4. $7y - 3x = 11$; $(5, 8)$

Find the value of d when r has the given value in the equation.

5. $d = 2.5r$; $r = 64$

6. $d = 3r + 120$; $r = 62$

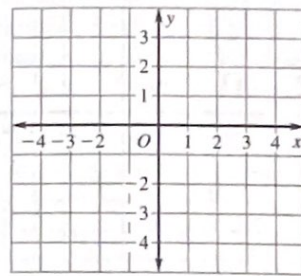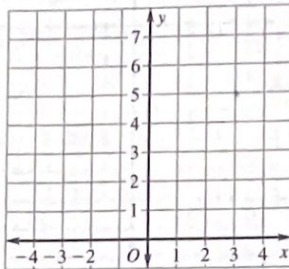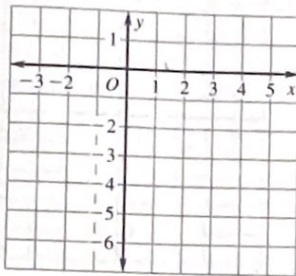**7.** $d - 5r = 40$; $r = 4$

8. $12r - d = -240$; $r = 9$

Graph the equation. Tell whether the equation is a function.

9. $y = x - 3$

10. $y = 2x + 4$

11. $y = -\dfrac{3}{4}x$

12. $y = -\dfrac{1}{3}x + 2$

13. $x = -11$

14. $y = 8$

15. $x = 8$

16. $y = -1$

17. $y = 2(x + 1)$
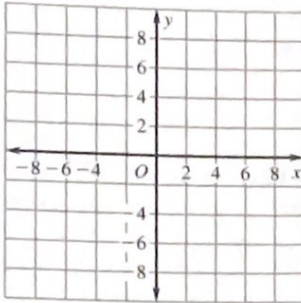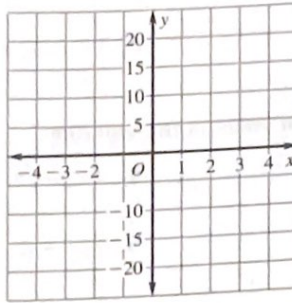
LESSON

8.2 **Practice**

Continued
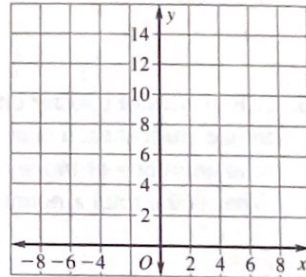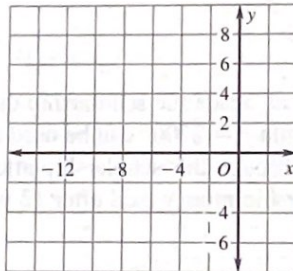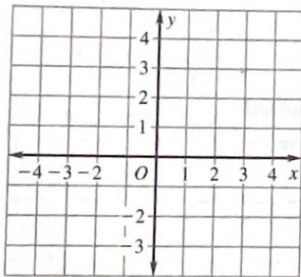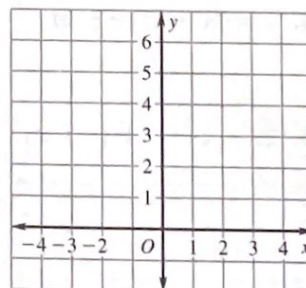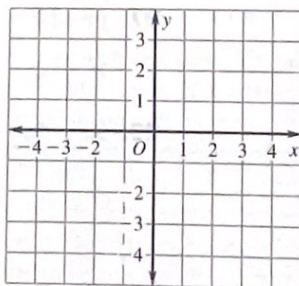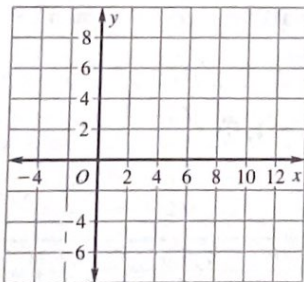
For use with pages 391–397

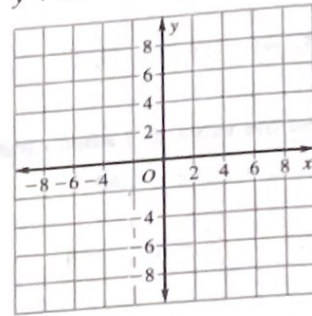**Write the equation in function form. Then graph the equation.**

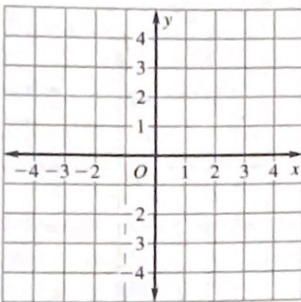**18.** $7x - y = 0$

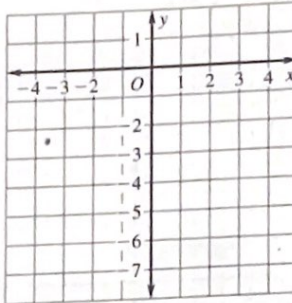**19.** $15x + y = 20$

20. $y + 6x - 12 = 0$
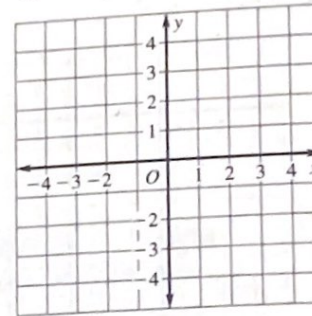

21. $6y - 3x = 12$

22. $3x - 2y = 6$

23. $4x - 12y + 24 = 0$

24. The formula $y = 2.205x$ converts a mass x in kilograms to a weight y in pounds. A sports car has a mass of 1270 kilograms. What is its weight in pounds?

25. A high school booster club sets up an academic scholarship that is awarded to one student each year. The formula $y = 2700x$ can be used to find the total amount y of money awarded through this scholarship after x years. What is the total amount of scholarship money paid after 12 years?

Find the value of a that makes the ordered pair a solution of the equation.

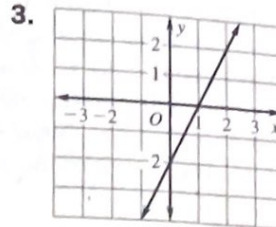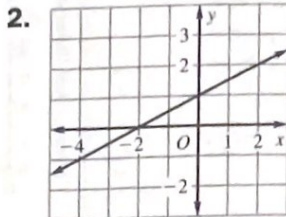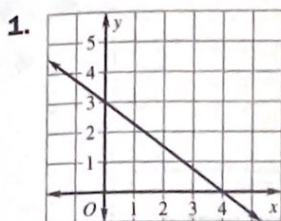**26.** $y = 3x + 7;\ (-3, a)$

27. $y = 11 - 7x;\ (a, -10)$

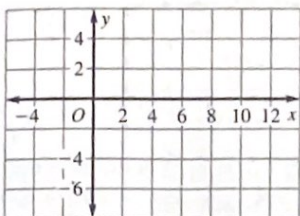**28.** $2x + 4y = 14;\ (-5, a)$

29. $9x - 5y = -9;\ (a - 1, 9)$

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Practice

For use with pages 398–402

Identify the x-intercept and the y-intercept of the line.
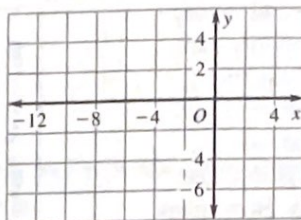
1.

2.

3.

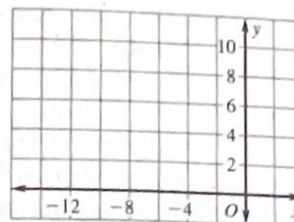**Find the intercepts of the equation's graph. Then graph the equation.**
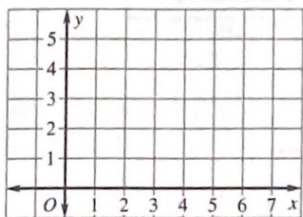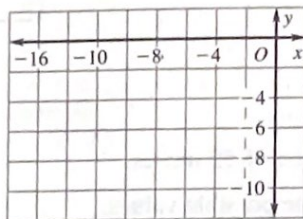
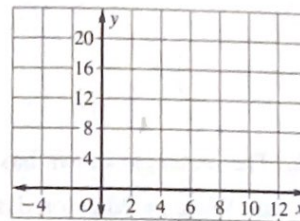**4.** $-x + 3y = -9$

5. $2x + 5y = -20$

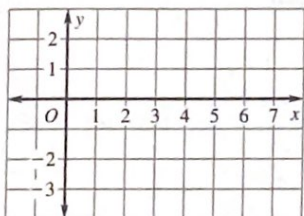**6.** $-3x + 4y = 36$

7. $6x + 7y = 42$

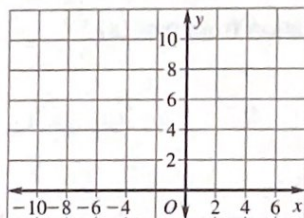
8. $4x + 5y = -60$

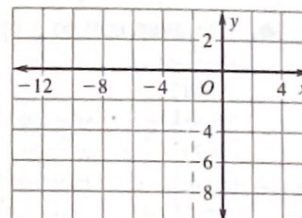**9.** $2x + y = 14$

10. $-\frac{1}{3}x + \frac{7}{6}y = -\frac{7}{3}$
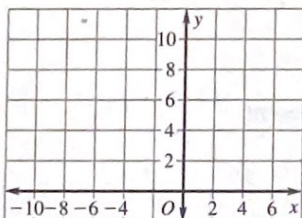

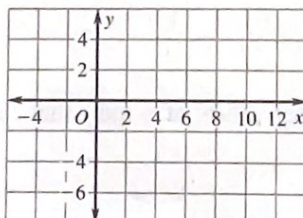**11.** $-\frac{3}{5}x + \frac{1}{5}y = \frac{9}{5}$
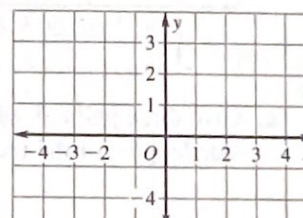

12. $\frac{3}{8}x + \frac{1}{2}y = -3$

13. $-21.9x + 6.57y = 65.7$

14. $-8.5x + 13.6y = -68$


15. $-6.5x + 1.3y = 3.25$

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LESSON

8.3 **Practice**

Continued   For use with pages 398–402

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16. You are in charge of buying salads for a picnic.
You have $20 and plan to buy potato salad and
pasta salad. Potato salad costs $1.25 per pound,
and pasta salad costs $2.50 per pound. Write an
equation describing the possible amounts of
potato salad and pasta salad that you can buy.
Use intercepts to graph the equation.

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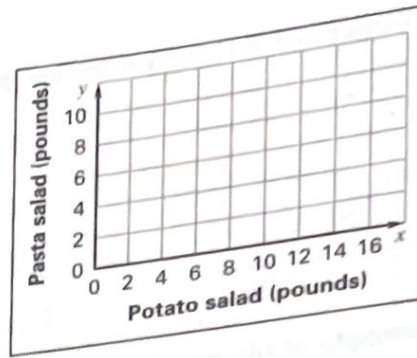
17. A car rental agency rents economy and luxury
cars by the day. The number of economy cars
y rented in one day is given by the equation
$y = 24 - 4x$, where x is the number of luxury
cars rented. Find the x-intercept and the
y-intercept of the given equation's graph. Use
the intercepts to graph the equation. How many
economy cars are rented when 4 luxury cars
have been rented?

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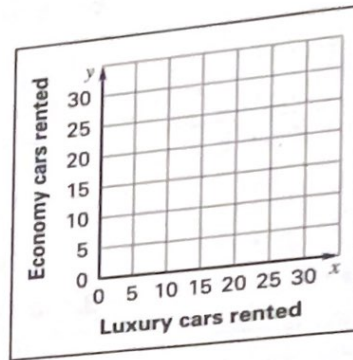
18. The rectangle shown has a perimeter of 52 inches.

a. Write an equation describing the possible values
of x and y.
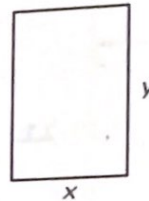
b. Use intercepts to graph the equation from part (a).
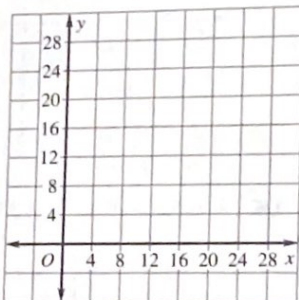
c. Give three pairs of whole-number values of x and y that could represent
side lengths of the rectangle.