Name _____ Class _____ Date _____

Practice 5-3

Standard Form

Find the *x* – and *y* –intercepts of each equation.

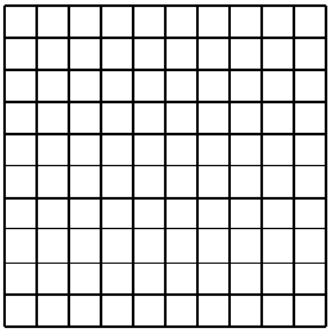
1. $x + y = 3$ **2.** $x + 3y = -3$ **3.** $-2x + 3y = 6$ **4.** $5x - 4y = -20$

5. $3x + y = 12$ **6.** $7x + 3y = 21$ **7.** $y = -2.5$ **8.** $2x - 3y = 4$

Match each equation with its graph.

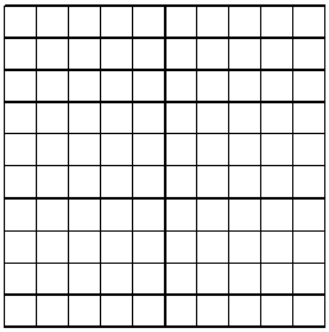
9. $3x + y = 12$

A.



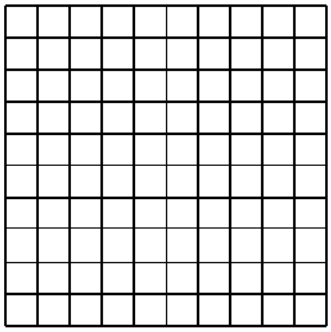
10. $-3x + 4y = 12$

B.



11. $3x + 4y = 12$

C.



Graph each equation using *x*– and *y*–intercepts.

12. $3x + y = 3$ **13.** $-3x + 5y = 15$ **14.** $2x + y = 3$ **15.** $8x - 3y = 24$

16. $3x - 5y = 15$ **17.** $x + 4y = 4$ **18.** $x = -3.5$ **19.** $y = 6$

For each equation, tell whether its graph is a horizontal or a vertical line.

20. $x = -2$ **21.** $y = 4$ **22.** $y = -1.5$ **23.** $x = 2\frac{1}{2}$

Write each equation in standard form using integers.

24. $y = 4x - 11$ **25.** $y = 2x - 6$ **26.** $y = -2x - 3$ **27.** $y = 5x - 32$

28. $y = \frac{2}{3}x - \frac{25}{3}$ **29.** $y = 43 - 4x$ **30.** $y = -\frac{4}{5}x + \frac{6}{5}$ **31.** $y = -\frac{x}{5}$

32. The drama club sells 200 lb of fruit to raise money. The fruit is sold in 5–lb bags and 10–lb bags.

a. Write an equation to find the number of each type of bag that the club should sell.

b. Graph your equation.

c. Use your graph to find two different combinations of types of bags.

33. The student council is sponsoring a carnival to raise money. Tickets cost $5 for adults and $3 for students. The student council wants to raise $450.

a. Write an equation to find the number of each type of ticket they should sell.

b. Graph your equation.

c. Use your graph to find two different combinations of tickets sold.