

LESSON
7.1
Practice C
For use with pages 426–434
Tell whether the ordered pair is a solution of the linear system.

1. $(-8, 4);$

$$-x + 4y = -8$$

$$3x - 5y = 3$$

2. $(7, -6);$

$$3x + 2y = 9$$

$$-4x - 3y = -10$$

3. $(4, -6);$

$$3x + y = -6$$

$$-x + 2y = 8$$

4. $(4, -2);$

$$\frac{1}{2}x - \frac{3}{4}y = \frac{7}{2}$$

$$4x + \frac{3}{8}y = \frac{61}{4}$$

5. $(-3, 5);$

$$-1.5x + 3.2y = 11.5$$

$$4.1x - 2y = -22.3$$

6. $(-2.5, 2.5);$

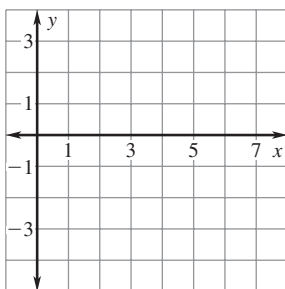
$$6x - 8y = -35$$

$$4x + 2y = -5$$

Solve the linear system by graphing. Check your solution.

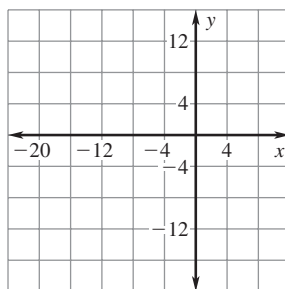
7. $-5x + 8y = -22$

$$3y - 2x = -9$$



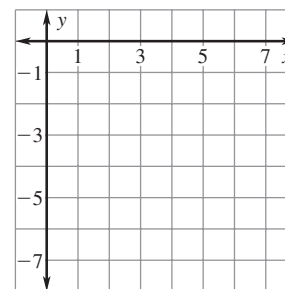
8. $-10x - 4y = 64$

$$-x + 2y = 16$$



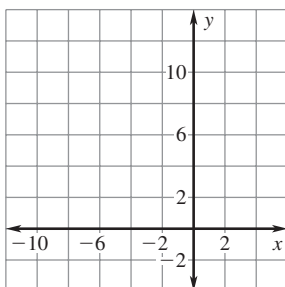
9. $3x - 7y = 50$

$$-4x + 2y = -30$$



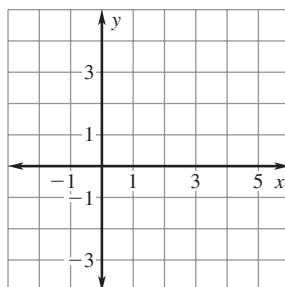
10. $\frac{2}{3}x - \frac{1}{3}y = -\frac{11}{3}$

$$x + \frac{1}{2}y = -\frac{1}{2}$$



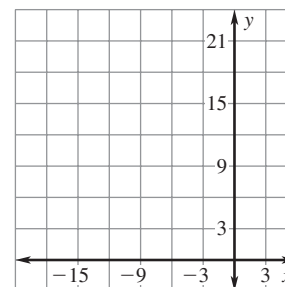
11. $\frac{2}{5}x + \frac{3}{5}y = 2$

$$-\frac{2}{3}x + y = \frac{2}{3}$$



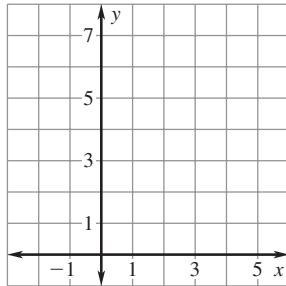
12. $4x - \frac{1}{3}y = -\frac{19}{3}$

$$-\frac{2}{3}x + y = \frac{23}{3}$$

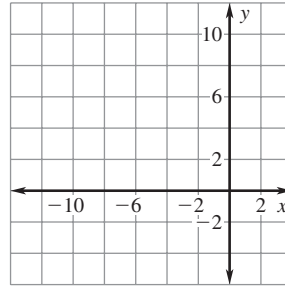


LESSON
7.1
Practice C *continued*
 For use with pages 426–434

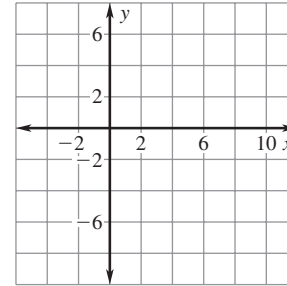
13. $1.8x - 2.2y = -4.2$
 $0.5x + 3.2y = 21.7$



14. $-1.4x + 6y = 24.6$
 $0.2x + y = 0.2$



15. $3.2x - y = 8.8$
 $5x - 2.5y = 10$



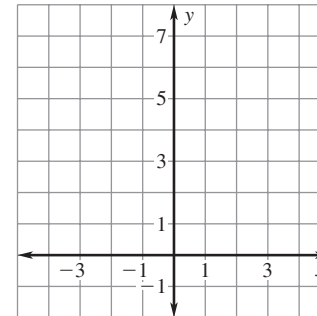
- 16.** Find the values for m and b so that the system $y = \frac{3}{4}x - 2$ and $y = mx + b$ has $(8, 4)$ as a solution.

- 17.** The graphs of the three lines given below form a triangle. Use a graph to find the coordinates of the vertices of the triangle.

Line 1: $2x + y = 7$

Line 2: $x + 2y = 2$

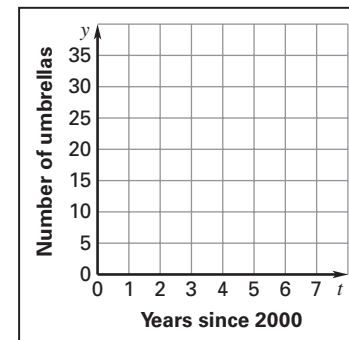
Line 3: $-x + y = 4$



- 18. Investments** A total of \$45,000 is invested into two funds paying 5.5% and 6.5% annual interest. The combined annual interest is \$2725. How much of the \$45,000 is invested in each type of fund? (*Hint:* Write one equation for the amount invested in each fund and another for the interest earned.)

- 19. Umbrella Sales** The table shows the number of automatic and manual opening umbrellas sold at a shop in 2000 and 2005. Use a linear model to represent the sales of each type of umbrella. Let $t = 0$ correspond to 2000. Sketch the graphs and estimate when the number of automatic umbrellas sold equaled the number of manual umbrellas sold.

Year	2000	2005
Automatic	15	25
Manual	25	15



- 20. Credit Account** With a minimum purchase of \$100, you can open a credit account at a music store. The store is offering either \$25 or 20% off your purchase if you open a credit account. You make a purchase of \$135 and decide to open a credit account. Should you choose \$25 or 20% off your purchase? *Explain.*