NAME _____ DATE _____

Practice C

For use with pages 398–403

Decide whether the ordered pair is a solution of the system of linear equations.

1. $(1, 1), (-1, 5)$

$2x + y = 3$

$x - 2y = -1$

2. $(-2, 4), (-1, 0)$

$4x + y = -4$

$-x - y = 1$

3. $(-5, -8), (4, 1)$

$x - y = 3$

$3x - y = 11$

4. $(-6, -4), (0, -8)$

$x - 3y = 6$

$2x - y = -8$

5. $(-6, -9), (-4, 8)$

$-4x + y = 8$
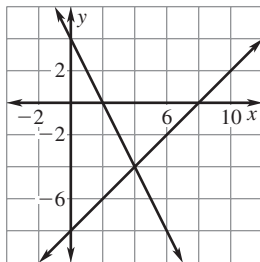
$5x - 3y = -3$

6. $(6, -7), (-6, 2)$

$-2x - 3y = 6$

$3x + 4y = -10$

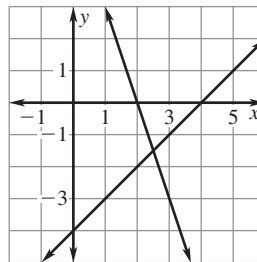**Use the graph to solve the linear system. Check your solution algebraically.**
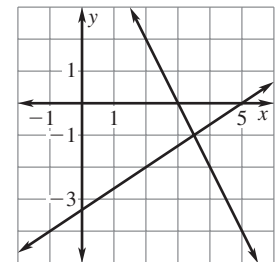
7. $-x + y = -8$

$2x + y = 4$

8. $3x + y = 6$

$-x + y = -4$

9. $4x + 2y = 12$

$2x - 3y = 10$

Graph and check to solve the linear system.

10. $-3x + y = 8$

$-x + y = -2$

11. $-2x + y = 1$

$y = -5$

12. $x - 2y = 7$

$-5x + y = 10$

13. $y = -4x - 2$

$y = -2x + 1$

14. $y = \frac{1}{2}x + 9$

$y = -x + 6$

15. $3x - 5y = -30$

$x - 5y = -20$

16. *Buying Juice*   You bought 12 bottles of apple juice and orange juice. The apple juice was on sale for $1.00 per bottle. The orange juice was $1.75 per bottle. You spent $15.00. How many bottles of each type of juice did you buy? (Hint: Write one equation for the total number of bottles and another equation for the total price.)

17. *Investments*   A total of $25,000 is invested in two funds paying 5% and 6% annual interest. The combined annual interest is $1400. How much of the $25,000 is invested in each type of fund? (Hint: Write one equation for the amount invested in each fund and another for the interest earned.)

18. *Umbrella Sales*   The matrix gives the number of automatic and manual opening umbrellas sold at a shop in 1985 and 1995. Use a linear model to represent the sales of each type of umbrella. Let $t = 0$ correspond to 1985. Sketch the graphs and estimate when the number of automatic umbrellas sold equaled the number of manual umbrellas sold.

	1985	1995
Automatic	10	20
Manual	25	10