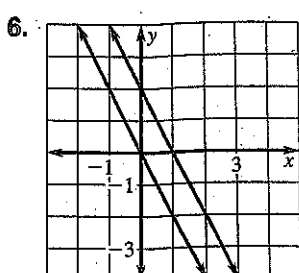
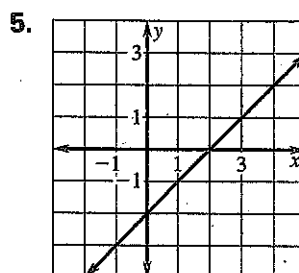
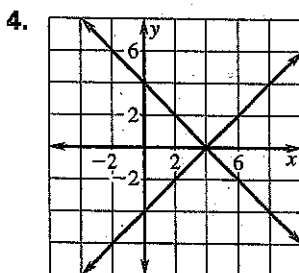
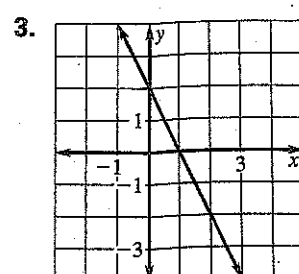
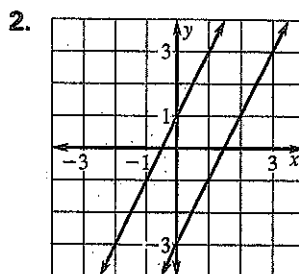
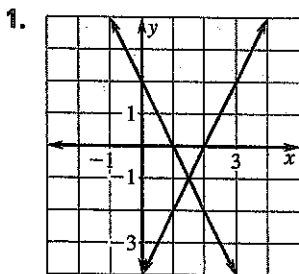


Practice A

For use with pages 415-422

Match the graph with its linear system and tell how many solutions the system has.



- A. $-2x + y = 1$
 $-4x + 2y = -6$
- D. $2x + y = 2$
 $-2x - y = 0$

- B. $x - y = 4$
 $x + y = 4$
- E. $-2x + y = -4$
 $2x + y = 2$

- C. $6x + 3y = 6$
 $2x + y = 2$
- F. $x - y = 2$
 $3x - 3y = 6$

Use the substitution method or linear combinations to solve the linear system and tell how many solutions the system has.

7. $x + y = -1$
 $x + y = 8$
8. $x - 3y = 2$
 $-2x + 6y = 2$
9. $3x - 2y = 0$
 $3x - 2y = -4$
10. $6x + 4y = 14$
 $3x + 2y = 2$
11. $3x - 2y = 3$
 $-6x + 4y = -6$
12. $-2x + 4y = -2$
 $-x - 2y = 3$

Use the graphing method to solve the linear system and tell how many solutions the system has.

13. $x - y = 5$
 $x - y = 2$
14. $3x - 10y = -15$
 $-3x + 10y = 15$
15. $-x + 4y = -1$
 $3x - 12y = -3$
16. $6x - 5y = 3$
 $-12x + 10y = 5$
17. $-3x - 2y = 6$
 $-6x + 4y = -12$
18. $6x - 3y = 9$
 $-4x + 2y = 6$

19. **U.S. Population** The male and female populations of the United States in 1960 and 1990 are shown. Model the data with a linear system. Let x represent the number of years since 1960, and let y represent the population in millions.

Population (in millions)

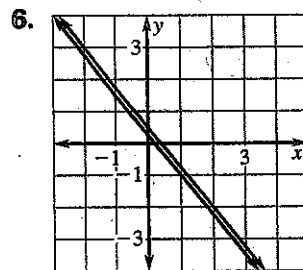
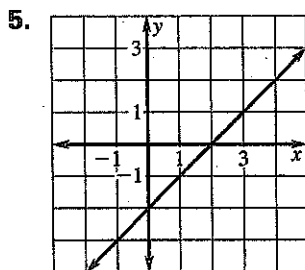
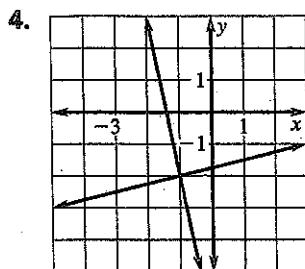
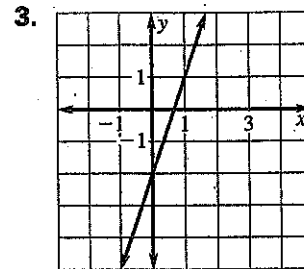
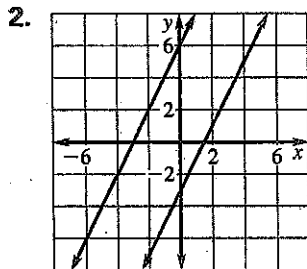
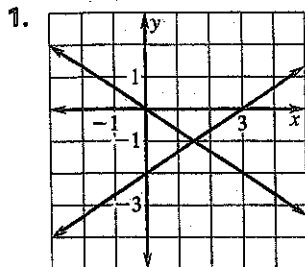
	Male	Female
1960	89	91
1990	122	128

20. Discuss the linear system you found in Exercise 19. Are the two lines parallel? Do you think that the number of men in the U.S. will equal the number of women before the year 2000? Explain.

Practice B

For use with pages 415-422

Match the graph with its linear system and tell how many solutions the system has.



- A. $-2x + y = 6$
 $-4x + 2y = -6$
 D. $5x + 4y = 2$
 $-5x - 4y = -1$

- B. $x - 4y = 7$
 $5x + y = -7$
 E. $-2x + 3y = -6$
 $2x + 3y = 0$

- C. $-9x + 3y = -6$
 $-3x + y = -2$
 F. $x - y = 2$
 $7x - 7y = 14$

Use the substitution method or linear combinations to solve the linear system and tell how many solutions the system has.

7. $-8x + 8y = -6$
 $3x - 3y = 8$
 8. $-6x - 6y = -12$
 $-2x - 2y = -4$
 9. $-4x - 2y = 2$
 $4x - 2y = 18$
 10. $6x - 4y = -6$
 $3x + 2y = 1$
 11. $3x - 2y = -5$
 $-9x + 6y = 15$
 12. $x + 3y = -3$
 $\frac{1}{3}x + y = 1$

Use the graphing method to solve the linear system and tell how many solutions the system has.

13. $2x + y = 7$
 $4x + 2y = -10$
 14. $-2x + 3y = 18$
 $-2x + 3y = -18$
 15. $-x + 4y = -3$
 $3x - 12y = 3$
 16. $6x - 5y = 3$
 $-2x + \frac{5}{3}y = 1$
 17. $x - 7y = 10$
 $-6x + 4y = -22$
 18. $\frac{1}{2}x + y = -2$
 $\frac{3}{2}x + 3y = 6$

19. **Revenue and Cost** The revenue and cost of running a business in 1997 and 2000 are given at the right. Model the data with a linear system.

20. **Profit** Profit can be defined as revenue minus cost. What does the graph from Exercise 19 tell you about the business' annual profit from 1997 to 2000?

Amount (in \$1000)

	Revenue	Cost
1997	50	25
2000	200	175