

6-4 Practice

Elimination Using Multiplication

Use elimination to solve each system of equations.

1. $2x - y = -1$

$3x - 2y = 1$

2. $5x - 2y = -10$

$3x + 6y = 66$

3. $7x + 4y = -4$

$5x + 8y = 28$

4. $2x - 4y = -22$

$3x + 3y = 30$

5. $3x + 2y = -9$

$5x - 3y = 4$

6. $4x - 2y = 32$

$-3x - 5y = -11$

7. $3x + 4y = 27$

$5x - 3y = 16$

8. $0.5x + 0.5y = -2$

$x - 0.25y = 6$

9. $2x - \frac{3}{4}y = -7$

$x + \frac{1}{2}y = 0$

10. $6x - 3y = 21$

$2x + 2y = 22$

11. $3x + 2y = 11$

$2x + 6y = -2$

12. $-3x + 2y = -15$

$2x - 4y = 26$

13. Eight times a number plus five times another number is -13 . The sum of the two numbers is 1. What are the numbers?

14. Two times a number plus three times another number equals 4. Three times the first number plus four times the other number is 7. Find the numbers.

15. **FINANCE** Gunther invested \$10,000 in two mutual funds. One of the funds rose 6% in one year, and the other rose 9% in one year. If Gunther's investment rose a total of \$684 in one year, how much did he invest in each mutual fund?

16. **CANOEING** Laura and Brent paddled a canoe 6 miles upstream in four hours. The return trip took three hours. Find the rate at which Laura and Brent paddled the canoe in still water.

17. **NUMBER THEORY** The sum of the digits of a two-digit number is 11. If the digits are reversed, the new number is 45 more than the original number. Find the number.