

6-3 Practice

Elimination Using Addition and Subtraction

Use elimination to solve each system of equations.

1. $x - y = 1$
 $x + y = -9$

2. $p + q = -2$
 $p - q = 8$

3. $4x + y = 23$
 $3x - y = 12$

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

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

6. $5x + 3y = 22$
 $5x - 2y = 2$

7. $5x + 2y = 7$
 $-2x + 2y = -14$

8. $3x - 9y = -12$
 $3x - 15y = -6$

9. $-4c - 2d = -2$
 $2c - 2d = -14$

10. $2x - 6y = 6$
 $2x + 3y = 24$

11. $7x + 2y = 2$
 $7x - 2y = -30$

12. $4.25x - 1.28y = -9.2$
 $x + 1.28y = 17.6$

13. $2x + 4y = 10$
 $x - 4y = -2.5$

14. $2.5x + y = 10.7$
 $2.5x + 2y = 12.9$

15. $6m - 8n = 3$
 $2m - 8n = -3$

16. $4a + b = 2$
 $4a + 3b = 10$

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

18. $\frac{3}{4}x - \frac{1}{2}y = 8$
 $\frac{3}{2}x + \frac{1}{2}y = 19$

19. The sum of two numbers is 41 and their difference is 5. What are the numbers?

20. Four times one number added to another number is 36. Three times the first number minus the other number is 20. Find the numbers.

21. One number added to three times another number is 24. Five times the first number added to three times the other number is 36. Find the numbers.

22. **LANGUAGES** English is spoken as the first or primary language in 78 more countries than Farsi is spoken as the first language. Together, English and Farsi are spoken as a first language in 130 countries. In how many countries is English spoken as the first language? In how many countries is Farsi spoken as the first language?

23. **DISCOUNTS** At a sale on winter clothing, Cody bought two pairs of gloves and four hats for \$43.00. Tori bought two pairs of gloves and two hats for \$30.00. What were the prices for the gloves and hats?