

5 Chapter Test



Solve the system of linear equations by graphing.

1. $y = 4 - x$
 $y = x - 4$

2. $y = \frac{1}{2}x + 10$
 $y = 4x - 4$

3. $y + x = 0$
 $3y + 6x = -9$

Solve the system of linear equations by substitution. Check your solution.

4. $-3x + y = 2$
 $-x + y - 4 = 0$

5. $x + y = 20$
 $y = 2x - 1$

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

Solve the system of linear equations by elimination. Check your solution.

7. $2x + y = 3$
 $x - y = 3$

8. $x + y = 12$
 $3x = 2y + 6$

9. $-2x + y + 3 = 0$
 $3x + 4y = -1$

Without graphing, determine whether the system of linear equations has *one solution*, *infinitely many solutions*, or *no solution*. Explain your reasoning.

10. $y = 4x + 8$
 $y = 5x + 1$

11. $2y = 16x - 2$
 $y = 8x - 1$

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

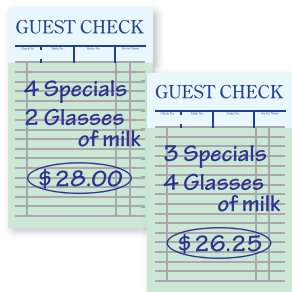
Use a graph to solve the equation. Check your solution.

13. $\frac{1}{4}x - 4 = \frac{3}{4}x + 2$

14. $8x - 14 = -2x - 4$

15. **FRUIT** The price of 2 pears and 6 apples is \$14. The price of 3 pears and 9 apples is \$21. Can you determine the unit prices for pears and apples? Explain.

16. **BOUQUET** A bouquet of lilies and tulips has 12 flowers. Lilies cost \$3 each, and tulips cost \$2 each. The bouquet costs \$32. Write and solve a system of linear equations to find the number of lilies and tulips in the bouquet.



17. **DINNER** How much does it cost for 2 specials and 2 glasses of milk?

