4 Chapter Test

Check It Out
Test Practice
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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. $8x - 14 = -2x - 4$

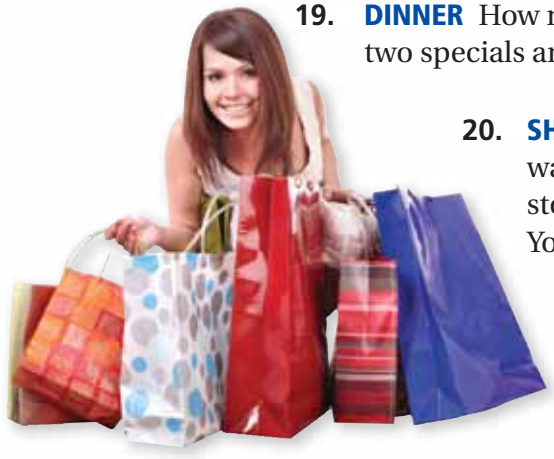
Graph the system of linear inequalities.

15. $y > \frac{1}{2}x + 4$
$2y \leq x + 4$

16. $y \geq -\frac{2}{3}x + 1$
$-3x + y > -2$

17. $x + y < 1$
$5x + y > 4$

18. 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.



19. DINNER How much does it cost for two specials and two glasses of milk?

20. SHOPPING You have \$110 to spend at the mall. You want to buy at most 6 articles of clothing. A clothing store sells shirts for \$12 and pairs of pants for \$18. You want to have at least \$20 left over for food.

a. Write and graph a system of linear inequalities that represents this situation.

b. How many shirts and pairs of pants can you buy at the store?