

Practice

Solving Systems of Equations in Two Variables

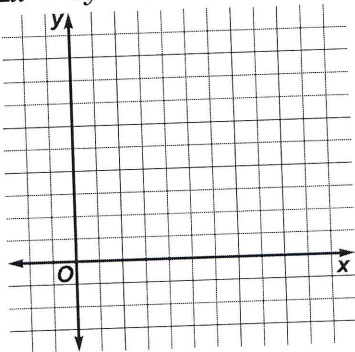
State whether each system is consistent and independent, consistent and dependent, or inconsistent.

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

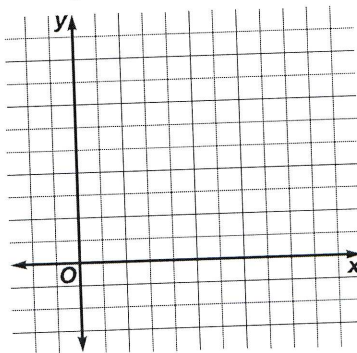
2. $2x - 5y = 8$
 $15y - 6x = -24$

Solve each system of equations by graphing.

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



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



Solve each system of equations algebraically.

5. $x + y = 4$
 $3x - 2y = 7$

6. $3x - 4y = 10$
 $-3x + 4y = 8$

7. $4x - 3y = 15$
 $2x + y = 5$

8. $4x + 5y = 11$
 $3x - 2y = -9$

9. $2x + 3y = 19$
 $7x - y = 9$

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

11. **Real Estate** AMC Homes, Inc. is planning to build three- and four-bedroom homes in a housing development called Chestnut Hills. Consumer demand indicates a need for three times as many four-bedroom homes as for three-bedroom homes. The net profit from each three-bedroom home is \$16,000 and from each four-bedroom home, \$17,000. If AMC Homes must net a total profit of \$13.4 million from this development, how many homes of each type should they build?