2-1

Practice

Solving Systems of Equations in Two Variables

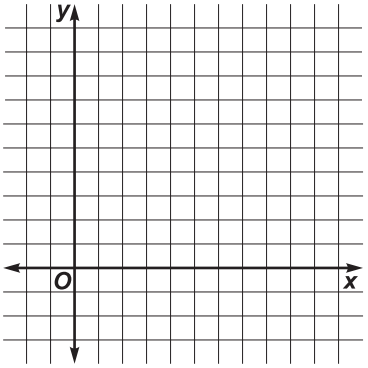
State whether each system is consistent and independent, consistent and dependent, or inconsistent.

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

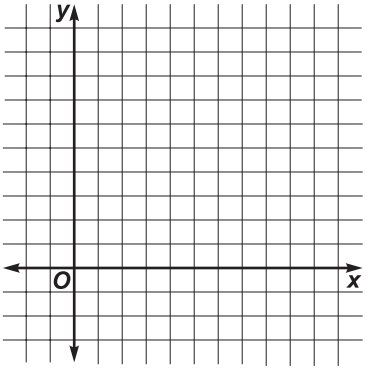
2. $2x - 5y = 8$
$15y - 6x = -24$

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?