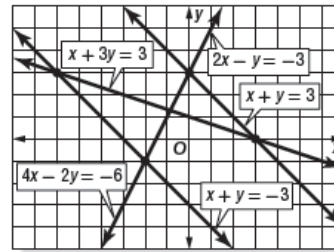


6-1 Practice**Graphing Systems of Equations**

Use the graph at the right to determine whether each system is *consistent* or *inconsistent* and if it is *independent* or *dependent*.



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

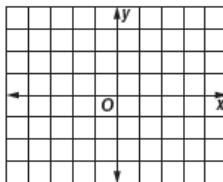
2. $2x - y = -3$
 $4x - 2y = -6$

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

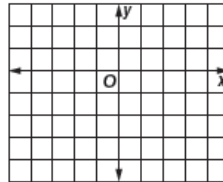
4. $x + 3y = 3$
 $2x - y = -3$

Graph each system and determine the number of solutions that it has. If it has one solution, name it.

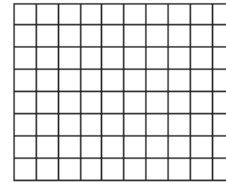
5. $3x - y = -2$
 $3x - y = 0$



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



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

**6-2 Practice****Substitution**

Use substitution to solve each system of equations.

1. $y = 6x$
 $2x + 3y = -20$

2. $x = 3y$
 $3x - 5y = 12$

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

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

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

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

7. $x + 2y = 13$
 $-2x - 3y = -18$

8. $x - 2y = 3$
 $4x - 8y = 12$

9. $x - 5y = 36$
 $2x + y = -16$

10. $2x - 3y = -24$
 $x + 6y = 18$

11. $x + 14y = 84$
 $2x - 7y = -7$

12. $0.3x - 0.2y = 0.5$
 $x - 2y = -5$

13. $0.5x + 4y = -1$
 $x + 2.5y = 3.5$

14. $3x - 2y = 11$
 $x - \frac{1}{2}y = 4$

15. $\frac{1}{2}x + 2y = 12$
 $x - 2y = 6$

16. $\frac{1}{3}x - y = 3$
 $2x + y = 25$

17. $4x - 5y = -7$
 $y = 5x$

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

6-3***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. $-\frac{1}{3}x - \frac{4}{3}y = -2$
 $\frac{1}{3}x - \frac{2}{3}y = 4$

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