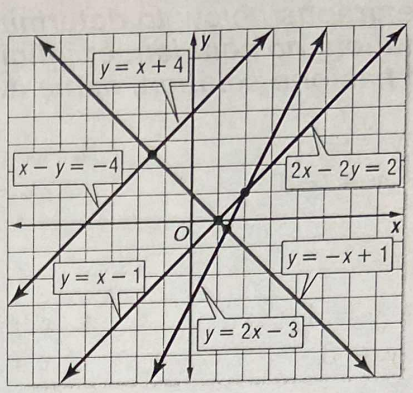
NAME _____ DATE _____ PERIOD ____

5-1 Skills Practice

Graphing Systems of Equations

Use the graph at the right to determine whether each system has *no* solution, *one* solution, or *infinitely many* solutions.



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

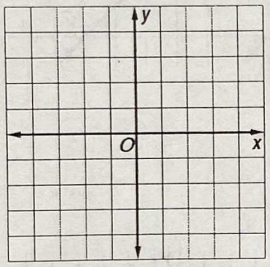
2. $x - y = -4$
$y = x + 4$

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

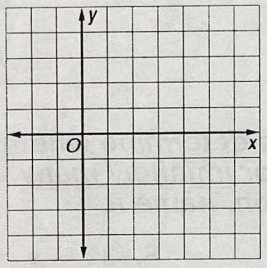
4. $y = 2x - 3$
$2x - 2y = 2$

Graph each system of equations. Then determine whether the system has *no* solution, *one* solution, or *infinitely many* solutions. If the system has one solution, name it.

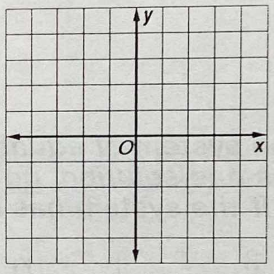
5. $2x - y = 1$
$y = -3$



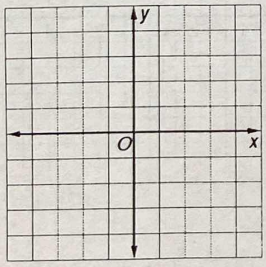
6. $x = 1$
$2x + y = 4$



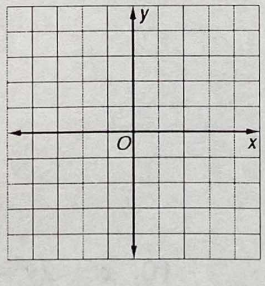
7. $3x + y = -3$
$3x + y = 3$



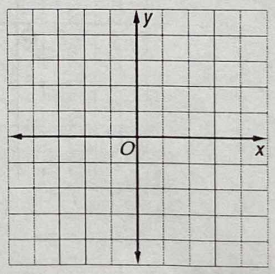
8. $y = x + 2$
$x - y = -2$



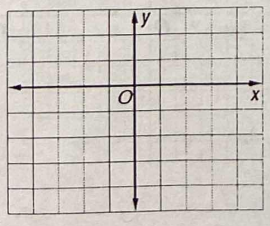
9. $x + 3y = -3$
$x - 3y = -3$



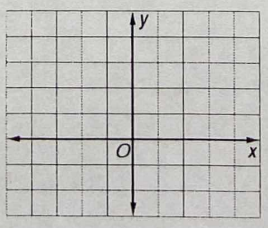
10. $y - x = -1$
$x + y = 3$



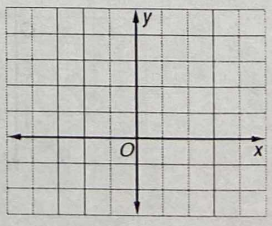
11. $x - y = 3$
$x - 2y = 3$



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



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



8-1

NAME _____ DATE _____

Practice

Student Edition
Pages 454–461

Graphing Systems of Equations

Use the graphs below to determine whether each system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

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

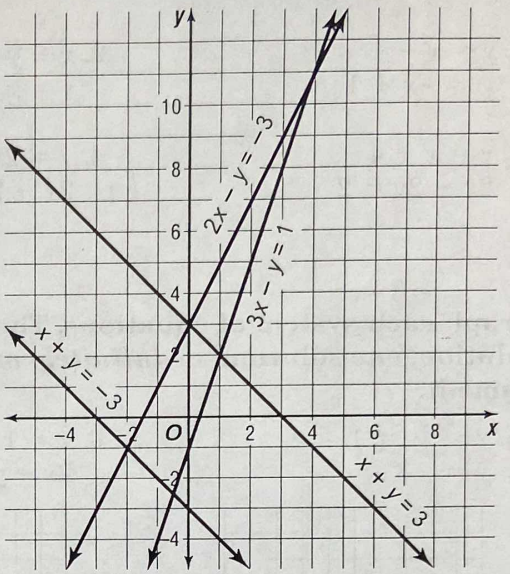
2. $4x - 2y = -6$
$2x - y = -3$

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

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

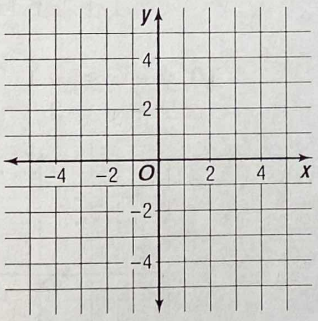
5. $x + y = 3$
$2x - y = -3$

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

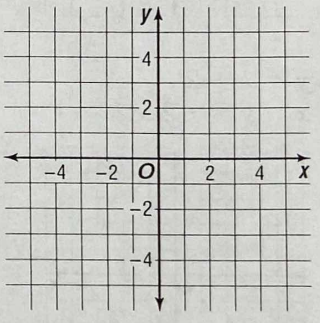


Graph each system of equations. Then determine whether the system has one solution, no solution, or infinitely many solutions. If the system has one solution, name it.

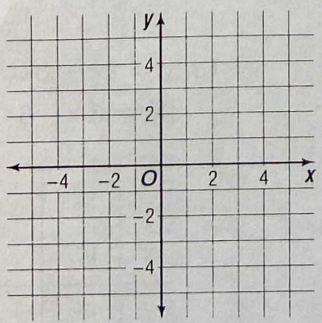
7. $x - y = 3$
$x - 2y = 3$



8. $3x - y = -4$
$3x - y = 0$



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



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