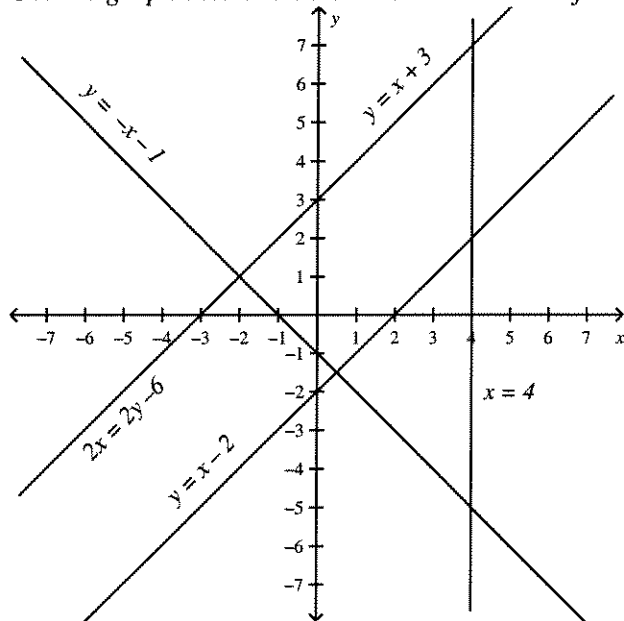


Algebra Practice Semester 2**Multiple Choice**

Identify the letter of the choice that best completes the statement or answers the question.

Use the graph below to determine the number of solutions the system has.



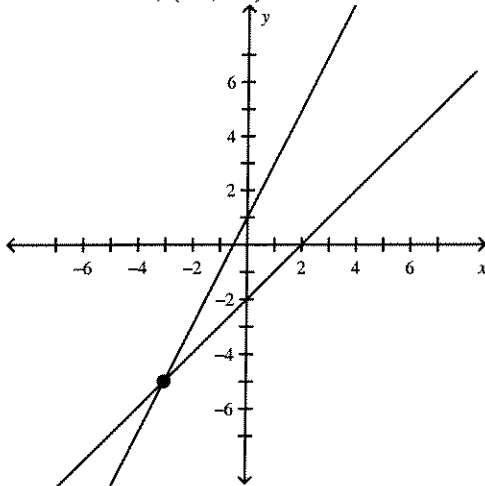
- _____ 1. $x = 4$
 $y = -x - 1$
a. no solution
b. one
c. two
d. infinitely many
- _____ 2. $2x = 2y - 6$
 $y = x + 3$
a. no solution
b. one
c. two
d. infinitely many

Graph the 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.

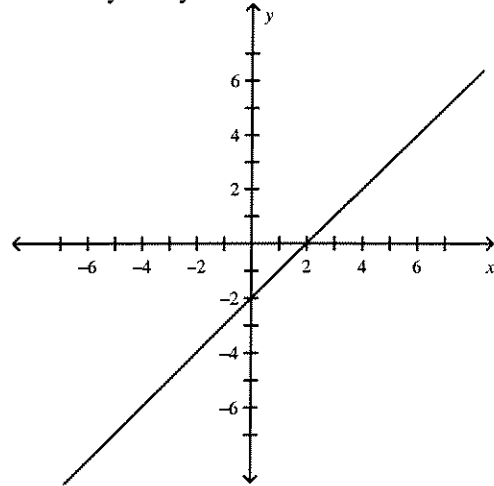
3. $y = 2x + 1$

$y = x - 2$

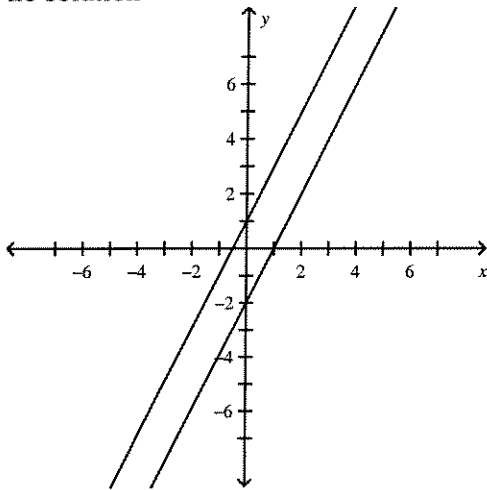
a. one solution; $(-5, -3)$



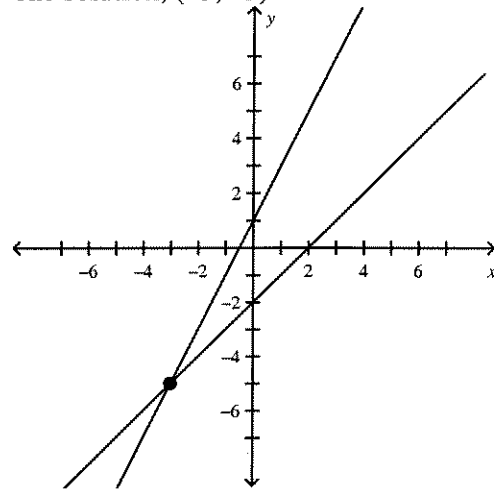
c. infinitely many



b. no solution



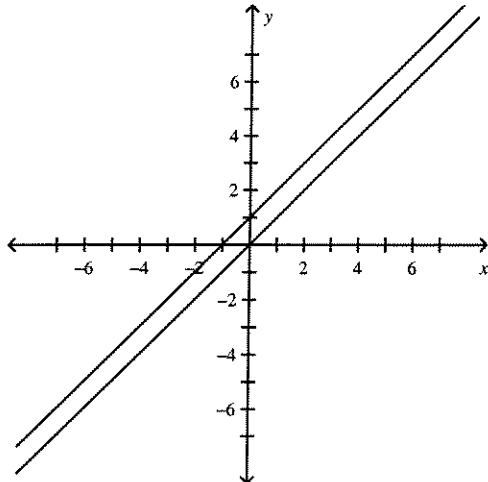
d. one solution; $(-3, -5)$



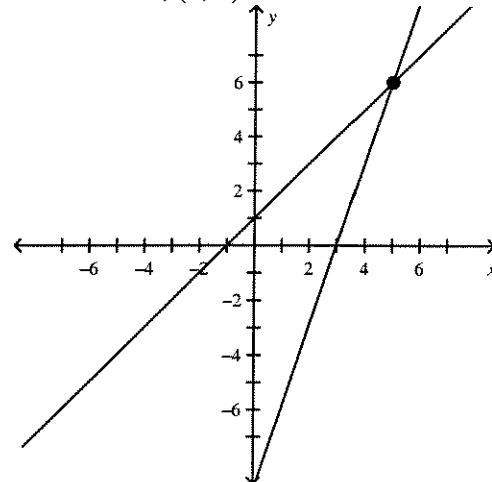
_____ 4. $-x + y = 1$

$$x - 3 = \frac{y}{3}$$

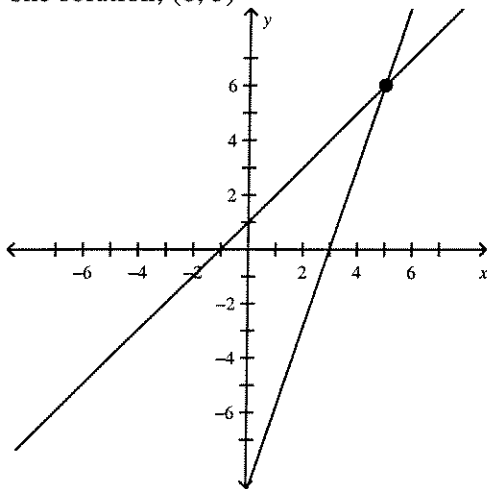
a. no solution



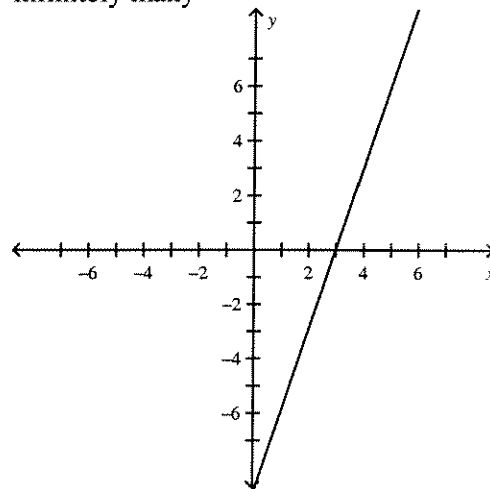
c. one solution; (5, 6)



b. one solution; (6, 5)



d. infinitely many



Use substitution to solve the system of equations.

_____ 5. $y = x + 3$

$$8x - 7y = 12$$

a. (36, 33)

b. (-9, -6)

c. (12, 15)

d. (33, 36)

_____ 6. $9 = x - 2y$

$$3x + 5 = 2y$$

a. (-7, -8)

b. infinitely many solutions

c. (17, 4)

d. (-13, -11)

_____ 7. The sum of two numbers is 90. Their difference is 12. What are the numbers?

a. no solution

b. 31 and 59

c. 35 and 47

d. 39 and 51

