

4.1 Systems of Equations in Two Variables-Solve by Graphing

4.2 Systems of Equations in Two Variables-Solve by Substitution

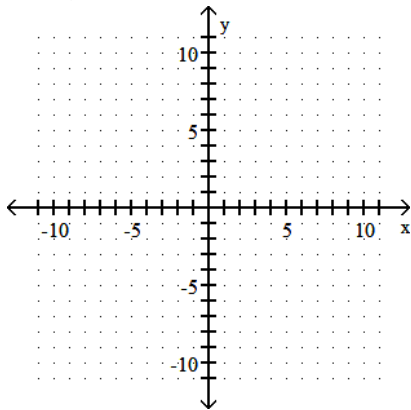
Decide whether or not the ordered pair is a solution of the system.

- 1)  $(-6, -5)$  1) \_\_\_\_\_  
 $3x + y = -23$   
 $4x + 3y = -39$   
 A) No B) Yes

- 2)  $(1, 3)$  2) \_\_\_\_\_  
 $3x + y = 0$   
 $4x + 3y = -5$   
 A) Yes B) No

Solve the system of equations by graphing. If the system is inconsistent or the equations are dependent, say so.

- 3)  $3x + y = -7$  3) \_\_\_\_\_  
 $x + 2y = -4$



- A)  $\{(-2, -1)\}$  B)  $\{(2, -1)\}$  C)  $\{(-3, 2)\}$  D)  $\{(-2, -3)\}$

Without graphing, answer the following questions for the linear system.

- (i) Is the system inconsistent, are the equations dependent, or neither?  
 (ii) Is the graph a pair of intersecting lines, a pair of parallel lines, or one line?  
 (iii) Does the system have one solution, no solution, or an infinite number of solutions?

- 4)  $x + y = 5$  4) \_\_\_\_\_  
 $x + y = 2$   
 A) (i) inconsistent  
     (ii) parallel lines  
     (iii) no solution  
  
 B) (i) neither  
     (ii) intersecting lines  
     (iii) one solution  
  
 C) (i) dependent  
     (ii) one line  
     (iii) infinite number of solutions

5)  $3x - 9y = 6$

5) \_\_\_\_\_

$$y = \frac{1}{3}x - \frac{2}{3}$$

- A) (i) neither  
 (ii) intersecting lines  
 (iii) one solution

- B) (i) dependent  
 (ii) one line  
 (iii) infinite number of solutions

- C) (i) inconsistent  
 (ii) parallel lines  
 (iii) no solution

Solve by the substitution method.

6)  $x + 8y = -31$

6) \_\_\_\_\_

$-2x + 7y = -30$

A)  $\emptyset$

B)  $\{(0, -3)\}$

C)  $\{(1, -4)\}$

D)  $\{(-1, -3)\}$

7)  $x - 5y = 30$

7) \_\_\_\_\_

$6x - 4y = 24$

A)  $\{(6, 0)\}$

B)  $\{(1, -7)\}$

C)  $\emptyset$

D)  $\{(0, -6)\}$

8)  $x - 5y = 3$

8) \_\_\_\_\_

$-5x - 4y = -15$

A)  $\{(3, 0)\}$

B)  $\emptyset$

C)  $\{(x, y) | x - 5y = 3\}$

D)  $\{(-3, -1)\}$

9)  $9x - 7y = -65$

9) \_\_\_\_\_

$-5x + 5y = 45$

A)  $\{(-1, 9)\}$

B)  $\emptyset$

C)  $\{(-1, 8)\}$

D)  $\{(-2, 9)\}$

10)  $9x + 9y = -36$

10) \_\_\_\_\_

$-7x - 3y = 12$

A)  $\{(0, -3)\}$

B)  $\{(-1, -3)\}$

C)  $\{(0, -4)\}$

D)  $\emptyset$

11)  $x + 7y = -10$

11) \_\_\_\_\_

$-2x - 2y = 4$

A)  $\emptyset$

B)  $\{(-3, 1)\}$

C)  $\{(x, y) | -2x - 2y = 4\}$

D)  $\{(-\frac{2}{3}, -\frac{4}{3})\}$

12)  $x + y = -7$

12) \_\_\_\_\_

$x + y = -3$

A)  $\{(x, y) | x + y = -3\}$

B)  $\{(-7, -3)\}$

C)  $\emptyset$

D)  $\{(0, -10)\}$

Answer Key

Testname: PRACTICE06A

- 1) B
- 2) B
- 3) A
- 4) A
- 5) B
- 6) C
- 7) D
- 8) A
- 9) C
- 10) C
- 11) D
- 12) C