

Two lines, A and B, are represented by the following equations:

Line A: $-3x - 3y = -9$

Line B: $-7x - 3y = -17$

Which statement is true about the solution to the set of equations?

- The solution is (1, 2).
- There are no solutions.
- There are infinitely many solutions.
- The solution is (2, 1).

Which description best describes the solution to the following system of equation:

$$x - y = 9$$

$$-2x - y = 3$$

- Line $x - y = 9$ and line $-2x - y = 3$ intersect at the x-axis.
- Line $x - y = 9$ intersects the line $-2x - y = 3$.
- Line $x - y = 9$ intersects the origin.
- Line $x - y = 9$ and line $-2x - y = 3$ intersect at the y-axis.

Consider the following equations:

$$x + y = 2$$

$$y = x + 4$$

If the two equations are graphed, at what point do the lines representing the two equations intersect?

- (1, -3)
- (1, 3)
- (-1, 3)
- (-1, -3)

A set of equations is given below:

$$y = -2x + 7$$

$$y = 7x + 1$$

Which of the following steps can be used to find the solution to the set of equations?

- $-2x + 1 = 7x + 7$
- $-2x = 7x + 1$
- $7x = -2x + 7$
- $7x + 1 = -2x + 7$

Consider the following set of equations:

$$5y = 5x - 15$$

$$y = x - 3$$

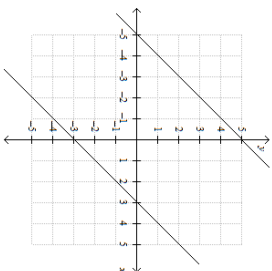
Which of the following best describes the solution to the given set of equations?

- a. Two solutions
- b. One solution
- c. Infinitely many solutions
- d. No solutions

$$y = -2x - 6$$

$$y = -5x - 9$$

Explain how you will solve the pair of equations by substitution. Show all the steps and write the solution in (x, y) form.



How many solutions are there for the pair of equations for the two lines? Explain your answer?