

Module E: Solving Systems of Linear Equations

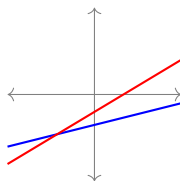
Readiness Assurance Test

Choose the most appropriate response for each question.

1) Which of the following describe the set of all points on the line $2x + 3y = 0$?

- (a) $\{(x, y) \mid 2x + 3y = 0\}$ (b) $\{(x, y)\}$ (c) $\{(2x, 3y)\}$ (d) $\{(2x, 3y) \mid 2x + 3y = 0\}$

2) How many solutions are there for the system of linear equations represented by the following graph?

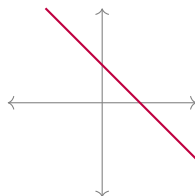


- (a) One (b) Two (c) Zero (d) Infinitely-many

3) Which of the following points is an element of the set $\{(x, y) \mid 3x + 4y = 12\}$?

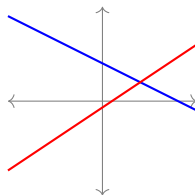
- (a) (1, 1) (b) (8, -3) (c) (3, 4) (d) (4, -3)

4) How many solutions are there for the system of linear equations represented by the following graph?
(This graph represents two completely overlapping lines.)



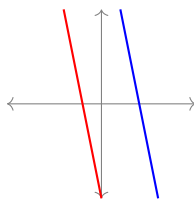
- (a) Infinitely-many (b) Two (c) One (d) Zero

5) How many solutions are there for the system of linear equations represented by the following graph?



- (a) Infinitely-many (b) Two (c) One (d) Zero

6) How many solutions are there for the system of linear equations represented by the following graph?
(This graph represents two non-overlapping parallel lines.)



- (a) Two (b) One (c) Zero (d) Infinitely-many

7) Solve the following system of linear equations.

$$y = 2x + 5$$

$$y = -x + 2$$

- (a) $(x, y) = (-1, 3)$ (b) $(x, y) = (4, -2)$ (c) There are no solutions. (d) There are infinitely-many solutions.

8) Solve the following system of linear equations.

$$y = 3x + 5$$

$$y = 3x + 2$$

- (a) $(x, y) = (3, 4)$ (b) $(x, y) = (-5, 1)$ (c) There are no solutions. (d) There are infinitely-many solutions.

9) Solve the following system of linear equations.

$$x + 2y = 4$$

$$2x - 3y = 1$$

- (a) $(x, y) = (-1, 4)$ (b) $(x, y) = (2, 1)$ (c) There are no solutions. (d) There are infinitely-many solutions.

10) Solve the following system of linear equations.

$$4x - 8y = 12$$

$$-6x + 12y = -18$$

- (a) $(x, y) = (3, 3)$ (b) $(x, y) = (-2, 1)$ (c) There are no solutions. (d) There are infinitely-many solutions.

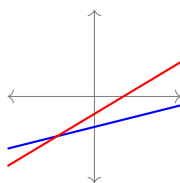
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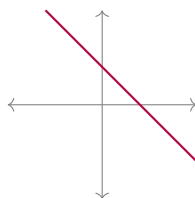


- (a) Infinitely-many (b) Two (c) One (d) Zero

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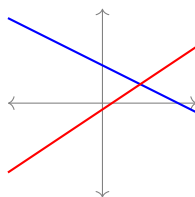
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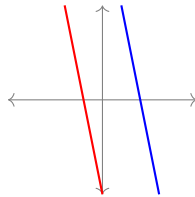
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- (a) There are infinitely-many solutions. (b) There are no solutions. (c) $(x, y) = (3, 3)$ (d) $(x, y) = (-2, 1)$

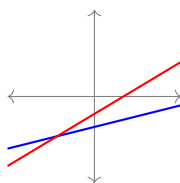
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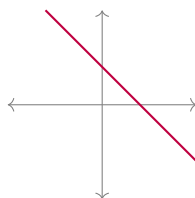


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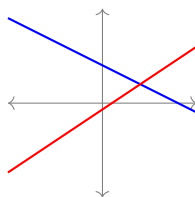
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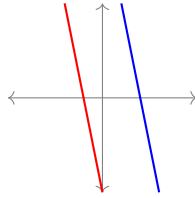
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