Name

Interpret intersections as solutions to systems

1

How would you check whether (x, y) = (-1, 2) is a solution to this system of linear equations?

$$x + y = 1$$
$$4x + 2y = 0$$

A

$$(-1) + (2) = 1$$
$$4x + 2y = 0$$

B

$$(2) + (-1) = 1$$
$$4(2) + 2(-1) = 0$$

C

$$(-1) + (2) = 1$$
$$4(-1) + 2(2) = 0$$

D

$$(0) + (2) = 1$$
$$4(0) + 2(2) = 0$$

2

Is (x, y) = (-1, 1) a solution to this system of linear equations?

$$x + 2y = 1$$
$$4x + 3y = -1$$

A

No

B

Yes

3

Solve for the variable by substituting the second equation into the first

$$16r - 2x = 12$$
$$x = 5r + 6$$
$$r = ?$$

A $r = 7$

B $r = 12$

C $r = 10$

D $r = 3$

E $r = 2$

F $r = 4$

4

The lines are the same line

A

One solution

B

Infinitely many solutions

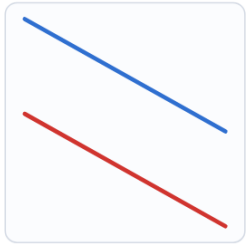
C

Zero solutions

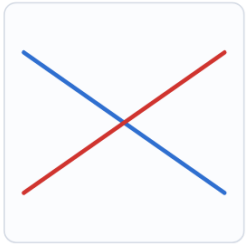
5

Zero solutions

A



B



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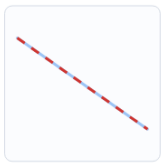
6

Which graph matches this system of linear equations?

$$2x + 4y = -1$$
$$4x + 8y = -2$$

A 

B 

7

How many solutions does this system of linear equations have?

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

A One solution

B Infinitely many solutions

C Zero solutions

8

Is the point (-5, -2) part of the solution set of this pair of linear inequalities?

$$\begin{cases} y \geq -2x + 3 \\ y \leq x - 4 \end{cases}$$

A No

B Yes

9

Which coordinate pair is part of the solution set of this pair of linear inequalities?

$$\begin{cases} y \geq -x + 1 \\ y \geq -2x + 5 \end{cases}$$

A $(7,\ 7)$

B $(-5,\ 1)$

10

Which coordinate pair is part of the shaded solution set?

A $(3,\ -9)$

B $(-6,\ 7)$

11

How many solutions does this system of linear equations have?

A Infinitely many solutions

B Zero solutions

C One solution

12

Find the intersection point of these two lines

$$y = 5x - 6$$
$$y = 8x + 6$$

A $(-4, -26)$

B $(-2, -23)$

C $(-8, -24)$

D $(-8, -27)$

E $(-2, -24)$

F $(-3, -29)$

13

Find the intersection point of these two lines

$$y = 8x - 1$$
$$y = 3x - 3$$

A $(-0.4, -4.2)$

B $(1.6, -4.2)$

C $(-1.4, -4.2)$

D $(0.6, -5.2)$

E $(-1.4, -7.2)$

F $(-5.4, -7.2)$