



Systems of Linear Equations

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

$$2x + 2y = 0$$

$$x + 2y = 1$$

A

$$\begin{aligned} 2(1) + 2(-1) &= 0 \\ (1) + 2(-1) &= 1 \end{aligned}$$

B

$$\begin{aligned} 2(-1) + 2(1) &= 0 \\ x + 2y &= 1 \end{aligned}$$

C

$$\begin{aligned} 2(0) + 2(1) &= 0 \\ (0) + 2(1) &= 1 \end{aligned}$$

D

$$\begin{aligned} 2(-1) + 2(1) &= 0 \\ (-1) + 2(1) &= 1 \end{aligned}$$

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

$$3x + 4y = 5$$

$$2x + 4y = 2$$

A

Yes

B

No

- 3** Find the intersection point of these two lines

$$y = -2x - 2$$

$$y = -4x - 2$$

A

 $(-2, 1)$

B

 $(-0, -2)$

C

 $(-4, -2)$

D

 $(3, 0)$

E

 $(4, -4)$

F

 $(2, -5)$

- 4** Find the intersection point of these two lines

$$y = 1x + 5$$

$$y = -5x + 5$$

A

 $(0, 9)$

B

 $(1, 7)$

C

 $(-0, 5)$

D

 $(2, 1)$

E

 $(3, 2)$

F

 $(4, 6)$

- 5** How many solutions does this system of linear equations have?

$$x + 2y = 5$$

$$3x + 3y = 5$$

A

Zero solutions

B

Infinitely many solutions

C

One solution



Systems of Linear Equations

- 6 What does this pair of linear equations tell you about the two lines?

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

$$3x + 4y = -8$$

- A The lines are the same line
B The lines are parallel
C The lines cross at one point

- 7 Which pair of linear equations matches this description?

Infinitely many solutions

A

$$3x + y = -7$$
$$9x + 3y = -21$$

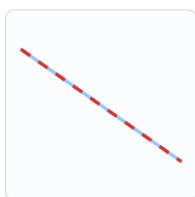
B

$$2x + y = -8$$
$$2x + 4y = 7$$

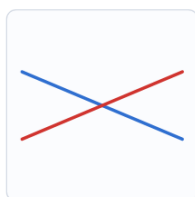
- 8 Which graph matches this description for a pair of linear equations?

Infinitely many solutions

A



B



- 9 How many solutions does this system of linear equations have?

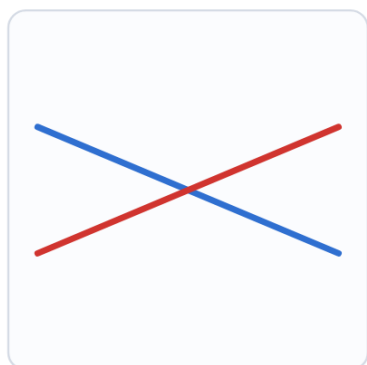


A Infinitely many solutions

B One solution

C Zero solutions

- 10 Which pair of linear equations matches this graph?



- 11 Which pair of linear equations matches this description?

The lines are the same line

A

$$x + 4y = 8$$
$$3x + 12y = 24$$

B

$$3x + y = -2$$
$$3x + y = -6$$

- 12 Find the intersection point of these two lines

$$y = 6x + 8$$
$$x = 1$$

A (1, 14)

B (2, 14)

C (1, 16)

D (3, 18)

E (1, 9)

F (1, 11)



Systems of Linear Equations

- 13** Find the intersection point of these two lines

$$y = 3x + 5$$

$$x = -4$$

A	$(-4, -5)$	B	$(-4, -7)$
C	$(-4, -9)$	D	$(-4, -3)$
E	$(-4, -4)$	F	$(-4, -11)$

- 15** Which equations represent what these meals cost

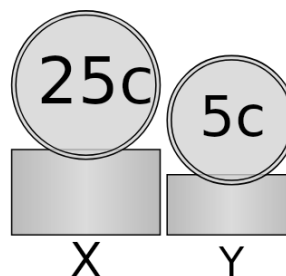
$$4(4 \text{ 🥗} + 4 \text{ 🍟}) = 12$$

$$4 \text{ 🥗} + 2 \text{ 🍟} = 22$$

$$1 \text{ 🥗} + 1 \text{ 🍟} = ?$$

- 14** With X Quarters and Y Nickels, some coins are worth \$0.80. With Y Quarters and X Nickels they would be worth \$0.40. What is X + Y?

\$0.80



A	11	B	9	C	10
D	12	E	4		

- 16** With X Dimes and Y Pennies, some coins are worth \$0.32. With Y Dimes and X Pennies they would be worth \$0.23. What equations would help us solve for X and Y?

\$0.32

