**Interpret solutions to systems in context****1**Is $x = -2$ a solution to this linear equation?

$$2(2x + 3) = 5x + 9$$

A

Yes

B

No

2

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

$$3x - y = 4$$

$$y = 2$$

$$x = ?$$

A

$$x = 1$$

B

$$x = 4$$

C

$$x = 2$$

D

$$x = 0$$

E

$$x = 3$$

F

$$x = 5$$

3

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

$$n = 3m + 8$$

$$n = 2m + 13$$

$$m = ?$$

A

$$m = 6$$

B

$$m = 7$$

C

$$m = 3$$

D

$$m = 8$$

E

$$m = 5$$

F

$$m = 4$$

4

The lines are the same line

A

Infinitely many solutions

B

One solution

C

Zero solutions

5How would you check whether $(x, y) = (2, 0)$ is a solution to this system of linear equations?

$$x + 2y = 2$$

$$3x + 4y = 6$$

A

$$(0) + 2(2) = 2$$

$$3(0) + 4(2) = 6$$

B

$$(2) + 2(0) = 2$$

$$3x + 4y = 6$$

C

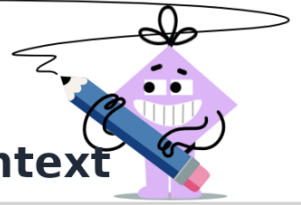
$$(2) + 2(0) = 2$$

$$3(2) + 4(0) = 6$$

D

$$(3) + 2(0) = 2$$

$$3(3) + 4(0) = 6$$



Interpret solutions to systems in context

6

How many solutions does this system of linear equations have?



A Infinitely many solutions

B Zero solutions

C One solution

7

Infinitely many solutions

A

The lines are parallel

B

The lines are the same line

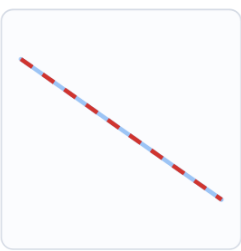
C

The lines cross at one point

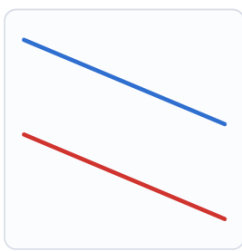
8

Infinitely many solutions

A



B

**9**

The lines cross at one point

A

$$\begin{aligned}x + 2y &= 2 \\ 4x + y &= 6\end{aligned}$$

B

$$\begin{aligned}4x + 2y &= 8 \\ 4x + 2y &= 13\end{aligned}$$

10

Infinitely many solutions

A

$$\begin{aligned}4x + 4y &= 6 \\ 8x + 8y &= 12\end{aligned}$$

B

$$\begin{aligned}2x + y &= -4 \\ 3x + 2y &= 5\end{aligned}$$

11

Which graph matches this system of linear equations?

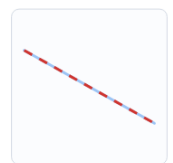
$$2x + 4y = 6$$

$$2x + 4y = 4$$

A



B

**12**

How would you check whether $x = 4$ is a solution to this linear equation?

$$4(2x + 3) = 2x + 36$$

A

$$4(2(4) + 3) = 2(4) + 36$$

B

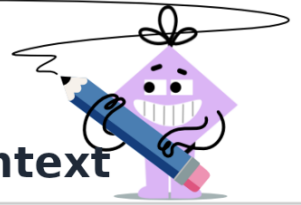
$$4(2(5) + 3) = 2(5) + 36$$

C

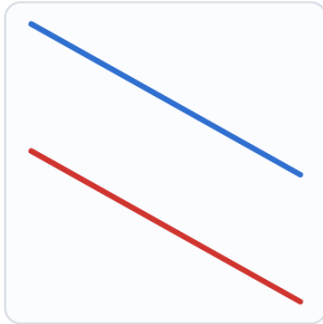
$$42(4) + 3 = 2(4) + 36$$

D

$$4(2(4) + 3) = 2x + 36$$

**Interpret solutions to systems in context****13**

Which pair of linear equations matches this graph?



A

$$4x + 2y = 0$$
$$12x + 6y = 0$$

B

$$x + 4y = -8$$
$$x + 4y = -11$$

14Is $(x, y) = (2, 1)$ a solution to this system of linear equations?

$$2x + 4y = 4$$

$$2x + y = 1$$

A

Yes

B

No

15

How many solutions does this system of linear equations have?

$$4x + 2y = 0$$

$$4x + 4y = 7$$

A Infinitely many solutions

B One solution

C Zero solutions

16

Find the intersection point of these two lines

$$y = -3x + 1$$

$$y = -6x + 7$$

A $(-3, -4)$ B $(2, -5)$ C $(0, -5)$ D $(-1, -7)$ E $(1, -10)$ F $(5, -3)$ **17**

Find the intersection point of these two lines

$$y = 7x + 4$$

$$y = -5x - 5$$

A $(-5.75, 2.75)$ B $(-0.75, -1.25)$ C $(2.25, -2.25)$ D $(-2.75, -2.25)$ E $(-5.75, -3.25)$ F $(-1.75, -3.25)$