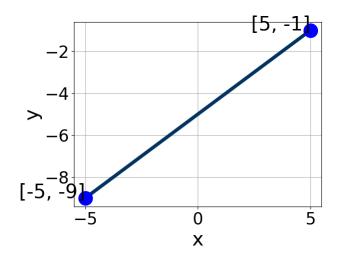
Progress Quiz 4

1. First, find the equation of the line containing the two points below. Then, write the equation as y = mx + b and choose the intervals that contain m and b.

$$(3, -4)$$
 and $(-9, -9)$

- A. $m \in [0.27, 1.6]$ $b \in [-6.2, -4.1]$
- B. $m \in [-0.58, 0.02]$ $b \in [-12.9, -8.7]$
- C. $m \in [0.27, 1.6]$ $b \in [-7.7, -6.9]$
- D. $m \in [0.27, 1.6]$ $b \in [-0.9, 0.2]$
- E. $m \in [0.27, 1.6]$ $b \in [4.7, 5.7]$
- 2. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-4, -1], B \in [4.2, 5.9], \text{ and } C \in [-28, -24]$
- B. $A \in [-3.8, 3.2], B \in [-1.8, 0], \text{ and } C \in [1, 6]$
- C. $A \in [1, 5], B \in [-7.5, -3.6], \text{ and } C \in [23, 26]$
- D. $A \in [1, 5], B \in [4.2, 5.9], \text{ and } C \in [-28, -24]$
- E. $A \in [-3.8, 3.2], B \in [0.5, 4.4], \text{ and } C \in [-12, -3]$
- 3. First, find the equation of the line containing the two points below.

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Then, write the equation as y = mx + b and choose the intervals that contain m and b.

$$(6,2)$$
 and $(-11,10)$

A.
$$m \in [-1.45, 0.23]$$
 $b \in [-8.5, -4.7]$

B.
$$m \in [0.26, 0.51]$$
 $b \in [13.4, 17.7]$

C.
$$m \in [-1.45, 0.23]$$
 $b \in [-4.8, -0.2]$

D.
$$m \in [-1.45, 0.23]$$
 $b \in [19.1, 22.9]$

E.
$$m \in [-1.45, 0.23]$$
 $b \in [3.9, 5.3]$

4. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(10x + 14) = -5(8x + 15)$$

A.
$$x \in [-3.31, -2.22]$$

B.
$$x \in [-1.41, -0.84]$$

C.
$$x \in [-1.55, -1.45]$$

D.
$$x \in [2.49, 3.39]$$

E. There are no real solutions.

5. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(-19x+17) = -9(-11x-18)$$

A.
$$x \in [-0.02, 0.19]$$

B.
$$x \in [2.36, 2.61]$$

C.
$$x \in [0.23, 0.59]$$

D.
$$x \in [-0.59, -0.2]$$

E. There are no real solutions.

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6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-5x-3}{7} - \frac{3x+6}{4} = \frac{-9x-3}{8}$$

- A. $x \in [-18.68, -16.68]$
- B. $x \in [-2.45, 3.55]$
- C. $x \in [-5.58, -3.58]$
- D. $x \in [2.26, 6.26]$
- E. There are no real solutions.
- 7. Find the equation of the line described below. Write the linear equation as y = mx + b and choose the intervals that contain m and b.

Perpendicular to 5x+6y=11 and passing through the point (-5,-3).

- A. $m \in [0.87, 1.62]$ $b \in [1.5, 2.9]$
- B. $m \in [0.59, 1.11]$ $b \in [2.1, 3.8]$
- C. $m \in [0.87, 1.62]$ $b \in [2.1, 3.8]$
- D. $m \in [-2.03, -0.73]$ $b \in [-9.5, -8.2]$
- E. $m \in [0.87, 1.62]$ $b \in [-3.5, -0.6]$
- 8. Find the equation of the line described below. Write the linear equation as y = mx + b and choose the intervals that contain m and b.

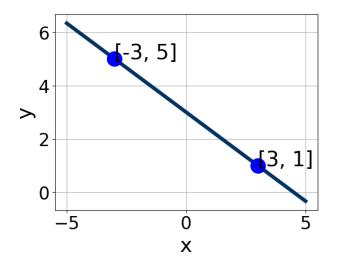
Parallel to 9x + 8y = 15 and passing through the point (5, 4).

- A. $m \in [-4, -1]$ $b \in [-1.08, -0.21]$
- B. $m \in [-1, 0.5]$ $b \in [9.11, 10.01]$
- C. $m \in [-0.5, 1.5]$ $b \in [-2, -1.44]$
- D. $m \in [-4, -1]$ $b \in [-10.38, -9.31]$
- E. $m \in [-4, -1]$ $b \in [9.11, 10.01]$

9. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-6x-3}{4} - \frac{-5x-7}{5} = \frac{4x-7}{6}$$

- A. $x \in [8.61, 9.45]$
- B. $x \in [0.47, 1.71]$
- C. $x \in [-1.19, -0.43]$
- D. $x \in [0.05, 0.55]$
- E. There are no real solutions.
- 10. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-0.1, 1], B \in [-1.95, -0.91], \text{ and } C \in [-5, 1]$
- B. $A \in [1.6, 2.8], B \in [1.98, 3.14], \text{ and } C \in [4, 15]$
- C. $A \in [-3, -1.8], B \in [-3.03, -2.25], \text{ and } C \in [-13, -6]$
- D. $A \in [1.6, 2.8], B \in [-3.03, -2.25], \text{ and } C \in [-13, -6]$
- E. $A \in [-0.1, 1], B \in [-0.49, 2.74], \text{ and } C \in [2, 8]$

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