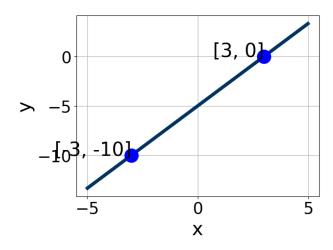
Progress Quiz 4

1. 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. $A \in [3, 9], B \in [-5.7, -2.2], \text{ and } C \in [11, 21]$
- B. $A \in [3, 9], B \in [1.3, 5.7], \text{ and } C \in [-16, -9]$
- C. $A \in [-4.67, -0.67], B \in [0.7, 2.2], \text{ and } C \in [-6, 0]$
- D. $A \in [-8, -4], B \in [1.3, 5.7], \text{ and } C \in [-16, -9]$
- E. $A \in [-4.67, -0.67], B \in [-2.9, 0.5], \text{ and } C \in [5, 11]$
- 2. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x+9}{2} - \frac{7x+3}{3} = \frac{3x+7}{8}$$

- A. $x \in [-1.2, -0.1]$
- B. $x \in [2.6, 4.2]$
- C. $x \in [-0.7, 0.8]$
- D. $x \in [1, 2.6]$
- E. There are no real solutions.
- 3. Solve the equation below. Then, choose the interval that contains the

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solution.

$$-7(5x - 18) = -8(-9x + 6)$$

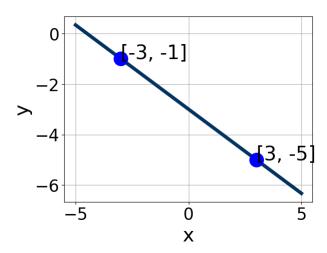
A.
$$x \in [1.55, 2.74]$$

B.
$$x \in [-2.29, -1.81]$$

C.
$$x \in [0.36, 0.96]$$

D.
$$x \in [-1.77, -0.42]$$

- E. There are no real solutions.
- 4. 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. $A \in [0.68, 2.02], B \in [2.54, 3.39], and <math>C \in [-12, -8]$
- B. $A \in [0.68, 2.02], B \in [-3.4, -1.98], \text{ and } C \in [7, 10]$
- C. $A \in [-2.64, -0.91], B \in [-3.4, -1.98], \text{ and } C \in [7, 10]$
- D. $A \in [-0.59, 1.1], B \in [0.46, 1.56], \text{ and } C \in [-3, -1]$
- E. $A \in [-0.59, 1.1], B \in [-1.28, -0.97], \text{ and } C \in [3, 7]$
- 5. 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.

$$(11, -9)$$
 and $(-6, -7)$

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A.
$$m \in [-0.12, -0.04]$$
 $b \in [-22, -19]$

B.
$$m \in [-0.12, -0.04]$$
 $b \in [4.71, 11.71]$

C.
$$m \in [0.09, 0.32]$$
 $b \in [-7.29, -1.29]$

D.
$$m \in [-0.12, -0.04]$$
 $b \in [-1, 4]$

E.
$$m \in [-0.12, -0.04]$$
 $b \in [-10.71, -6.71]$

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

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

A.
$$x \in [-0.83, 0.17]$$

B.
$$x \in [67.79, 72.79]$$

C.
$$x \in [12, 18]$$

D.
$$x \in [5.72, 7.72]$$

- E. There are no real solutions.
- 7. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-18x - 10) = -16(13x - 6)$$

A.
$$x \in [0.36, 0.79]$$

B.
$$x \in [-0.88, -0.32]$$

C.
$$x \in [20.04, 21.19]$$

D.
$$x \in [-0.17, 0.33]$$

- E. There are no real solutions.
- 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 3x - 7y = 13 and passing through the point (-9, -3).

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A.
$$m \in [-0.21, 0.83]$$
 $b \in [0.5, 1.7]$

B.
$$m \in [-0.21, 0.83]$$
 $b \in [4.1, 8]$

C.
$$m \in [2.31, 2.73]$$
 $b \in [0.5, 1.7]$

D.
$$m \in [-0.21, 0.83]$$
 $b \in [-2.1, 0.8]$

E.
$$m \in [-0.52, -0.34]$$
 $b \in [-7.5, -4.8]$

9. 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.

$$(-6,6)$$
 and $(3,-5)$

A.
$$m \in [-0.9, 3.5]$$
 $b \in [-9.22, -8.26]$

B.
$$m \in [-1.6, 0.7]$$
 $b \in [10.79, 13.35]$

C.
$$m \in [-1.6, 0.7]$$
 $b \in [1.29, 1.9]$

D.
$$m \in [-1.6, 0.7]$$
 $b \in [-1.52, -1]$

E.
$$m \in [-1.6, 0.7]$$
 $b \in [-8.05, -6.67]$

10. 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 8x + 3y = 9 and passing through the point (-6, -2).

A.
$$m \in [-5.1, -2.5]$$
 $b \in [17, 19]$

B.
$$m \in [-1, 0]$$
 $b \in [-20, -14]$

C.
$$m \in [-5.1, -2.5]$$
 $b \in [1, 7]$

D.
$$m \in [-5.1, -2.5]$$
 $b \in [-20, -14]$

E.
$$m \in [2, 4.3]$$
 $b \in [9, 16]$

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