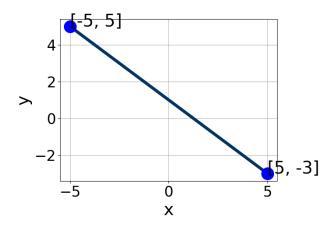
Progress Quiz 3 Version C

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. $A \in [-0.4, 1.6], B \in [-3.2, 0.5], \text{ and } C \in [-2.9, 0.2]$
- B. $A \in [2.1, 6.3], B \in [-6, -4], \text{ and } C \in [-6.5, -3.9]$
- C. $A \in [-4.8, -3.1], B \in [-6, -4], \text{ and } C \in [-6.5, -3.9]$
- D. $A \in [-0.4, 1.6], B \in [0.9, 3], \text{ and } C \in [-0.9, 1.5]$
- E. $A \in [2.1, 6.3], B \in [3.9, 5.9], \text{ and } C \in [3.3, 7.8]$

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

$$-5(6x - 12) = -10(2x + 13)$$

- A. $x \in [-3.4, 0.6]$
- B. $x \in [4, 9]$
- C. $x \in [-7, -4]$
- D. $x \in [19, 21]$
- E. There are no real solutions.
- 3. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(3x+14) = -19(-9x-6)$$

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A.
$$x \in [-0.82, -0.73]$$

B.
$$x \in [-0.65, -0.49]$$

C.
$$x \in [0.43, 0.52]$$

D.
$$x \in [-0.5, -0.42]$$

- E. There are no real solutions.
- 4. 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 + 8y = 3 and passing through the point (9,3).

A.
$$m \in [1.3, 3.1]$$
 $b \in [-15.4, -7.4]$

B.
$$m \in [-0.8, 1.2]$$
 $b \in [-15.4, -7.4]$

C.
$$m \in [-3, 0.1]$$
 $b \in [17.4, 20.4]$

D.
$$m \in [1.3, 3.1]$$
 $b \in [10.4, 14.4]$

E.
$$m \in [1.3, 3.1]$$
 $b \in [-6, -5]$

5. 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 9x + 4y = 12 and passing through the point (4, -2).

A.
$$m \in [-0.32, 0.68]$$
 $b \in [3.1, 6.5]$

B.
$$m \in [1.58, 2.49]$$
 $b \in [-4.6, -0.6]$

C.
$$m \in [-0.32, 0.68]$$
 $b \in [-7.2, -4.5]$

D.
$$m \in [-0.32, 0.68]$$
 $b \in [-4.6, -0.6]$

E.
$$m \in [-0.71, -0.02]$$
 $b \in [-1.1, -0.1]$

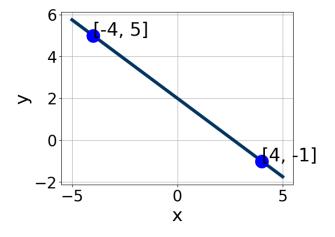
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6. First, find the equation of the line containing the two points below. Then, write the equation as y = mx + b and choose the intervals that contain m and b.

$$(7, -5)$$
 and $(-9, 9)$

- A. $m \in [-0.7, 3]$ $b \in [16.57, 17.98]$
- B. $m \in [-2.1, 0.8]$ $b \in [0.88, 1.19]$
- C. $m \in [-2.1, 0.8]$ $b \in [-12.48, -10.75]$
- D. $m \in [-2.1, 0.8]$ $b \in [-1.96, 0.76]$
- E. $m \in [-2.1, 0.8]$ $b \in [17.02, 18.34]$
- 7. 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. $A \in [2.24, 3.02], B \in [-4.2, -3.44], \text{ and } C \in [-12, -7]$
- B. $A \in [-0.48, 0.84], B \in [-1.95, 0.23], \text{ and } C \in [-2, 1]$
- C. $A \in [-4.64, -2.13], B \in [-4.2, -3.44], \text{ and } C \in [-12, -7]$
- D. $A \in [-0.48, 0.84], B \in [0.13, 1.5], \text{ and } C \in [2, 4]$
- E. $A \in [2.24, 3.02], B \in [3.72, 4.68], \text{ and } C \in [7, 14]$
- 8. Solve the linear equation below. Then, choose the interval that contains

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the solution.

$$\frac{-9x+9}{8} - \frac{-5x-8}{6} = \frac{-3x-4}{2}$$

A.
$$x \in [-17.38, -15.38]$$

B.
$$x \in [3.46, 9.46]$$

C.
$$x \in [-4.69, -1.69]$$

D.
$$x \in [-3.48, 1.52]$$

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

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

A.
$$x \in [4, 7.3]$$

B.
$$x \in [1.9, 2.6]$$

C.
$$x \in [0.3, 0.7]$$

D.
$$x \in [21.3, 24.9]$$

- E. There are no real solutions.
- 10. 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.

$$(6,-7)$$
 and $(3,-4)$

A.
$$m \in [-0.4, 3.8]$$
 $b \in [-8.2, -6.35]$

B.
$$m \in [-2.8, 0.1]$$
 $b \in [-1.34, -0.58]$

C.
$$m \in [-2.8, 0.1]$$
 $b \in [-13.05, -12.42]$

D.
$$m \in [-2.8, 0.1]$$
 $b \in [-8.2, -6.35]$

E.
$$m \in [-2.8, 0.1]$$
 $b \in [0.89, 1.93]$