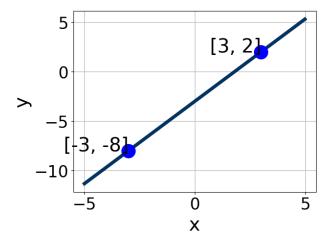
Progress Quiz 1 Version C

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. $A \in [2, 8], B \in [-4.2, -1.5], \text{ and } C \in [8.4, 9.3]$
- B. $A \in [-5, -2], B \in [2.5, 5.1], \text{ and } C \in [-9.1, -8.1]$
- C. $A \in [-3.67, 1.33], B \in [-0.9, 1.8], \text{ and } C \in [-4.4, -1.4]$
- D. $A \in [2, 8], B \in [2.5, 5.1], \text{ and } C \in [-9.1, -8.1]$
- E. $A \in [-3.67, 1.33], B \in [-2.8, -0.4], \text{ and } C \in [2.2, 3.7]$

2. 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 + 4y = 4 and passing through the point (7,4).

- A. $m \in [-0.96, -0.49]$ $b \in [-10.8, -8]$
- B. $m \in [0.65, 0.87]$ $b \in [-1.9, 0.4]$
- C. $m \in [-1.77, -0.82]$ $b \in [8.7, 11.3]$
- D. $m \in [-0.96, -0.49]$ $b \in [8.7, 11.3]$
- E. $m \in [-0.96, -0.49]$ $b \in [-3.8, -2.7]$

3. 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

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contain m and b.

$$(-8, -11)$$
 and $(8, 2)$

A.
$$m \in [0.1, 1.6]$$
 $b \in [-3.1, -2.69]$

B.
$$m \in [0.1, 1.6]$$
 $b \in [-4.77, -4.28]$

C.
$$m \in [0.1, 1.6]$$
 $b \in [-6.24, -5.26]$

D.
$$m \in [-2.6, 0]$$
 $b \in [7.22, 9.11]$

E.
$$m \in [0.1, 1.6]$$
 $b \in [3.65, 4.78]$

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

$$-4(12x+17) = -18(2x-19)$$

A.
$$x \in [-12.99, -12.04]$$

B.
$$x \in [-4.33, -2.85]$$

C.
$$x \in [-3.51, -2.14]$$

D.
$$x \in [9.16, 9.54]$$

E. There are no real solutions.

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

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

A.
$$x \in [-11.22, -5.22]$$

B.
$$x \in [-2.07, 3.93]$$

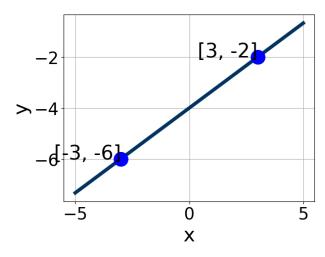
C.
$$x \in [-37, -30]$$

D.
$$x \in [-5.62, -3.62]$$

E. There are no real solutions.

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6. 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. $A \in [2, 4], B \in [-3.68, -2.68], \text{ and } C \in [11, 13]$
- B. $A \in [2, 4], B \in [2.58, 3.41], \text{ and } C \in [-16, -9]$
- C. $A \in [-0.67, 0.33], B \in [-0.49, 1.59], and C \in [-5, -2]$
- D. $A \in [-0.67, 0.33], B \in [-1.23, -0.63], \text{ and } C \in [3, 7]$
- E. $A \in [-8, -1], B \in [2.58, 3.41], \text{ and } C \in [-16, -9]$

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 4x + 9y = 11 and passing through the point (-3, 4).

- A. $m \in [-1.7, 1]$ $b \in [7.75, 13.75]$
- B. $m \in [-3.1, -1.7]$ $b \in [-2.75, 1.25]$
- C. $m \in [1.1, 6]$ $b \in [7.75, 13.75]$
- D. $m \in [1.1, 6]$ $b \in [6, 10]$
- E. $m \in [1.1, 6]$ $b \in [-10.75, -9.75]$

8. 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

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contain m and b.

$$(8, -9)$$
 and $(-8, -10)$

A.
$$m \in [0.02, 0.45]$$
 $b \in [-4.08, -1.06]$

B.
$$m \in [0.02, 0.45]$$
 $b \in [-10.15, -9.23]$

C.
$$m \in [0.02, 0.45]$$
 $b \in [8.54, 10.47]$

D.
$$m \in [0.02, 0.45]$$
 $b \in [-18.25, -15.24]$

E.
$$m \in [-0.98, 0.04]$$
 $b \in [-10.83, -9.77]$

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

$$-10(8x+15) = -16(-7x-13)$$

A.
$$x \in [-2, -0.1]$$

B.
$$x \in [-8.8, -6.5]$$

C.
$$x \in [-4, -2.6]$$

D.
$$x \in [0.4, 2.7]$$

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

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

A.
$$x \in [4.1, 5.4]$$

B.
$$x \in [14.7, 17.1]$$

C.
$$x \in [-0.6, 0.4]$$

D.
$$x \in [1.9, 3.2]$$

E. There are no real solutions.