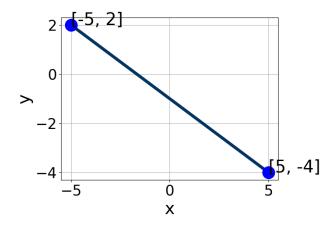
Progress Quiz 4

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.

$$(9, -9)$$
 and $(10, 3)$

- A. $m \in [11, 16]$ $b \in [-11, -6]$
- B. $m \in [11, 16]$ $b \in [-124, -114]$
- C. $m \in [-13, -10]$ $b \in [119, 127]$
- D. $m \in [11, 16]$ $b \in [-19, -15]$
- E. $m \in [11, 16]$ $b \in [115, 119]$
- 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. $A \in [1.6, 5.1], B \in [4, 7.7], \text{ and } C \in [-5.2, -2.8]$
- B. $A \in [1.6, 5.1], B \in [-6.5, -3.6], \text{ and } C \in [4.7, 5.2]$
- C. $A \in [-0.8, 1.3], B \in [-0.1, 1.2], \text{ and } C \in [-2.1, 0.7]$
- D. $A \in [-6.7, -1.3], B \in [-6.5, -3.6], \text{ and } C \in [4.7, 5.2]$
- E. $A \in [-0.8, 1.3], B \in [-1.1, 0.2], \text{ and } C \in [-0.2, 1.9]$
- 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 $(-4,5)$

A.
$$m \in [-3.5, 0.5]$$
 $b \in [8.4, 9.2]$

B.
$$m \in [-3.5, 0.5]$$
 $b \in [-0.2, 2.3]$

C.
$$m \in [-3.5, 0.5]$$
 $b \in [16, 19.8]$

D.
$$m \in [-3.5, 0.5]$$
 $b \in [-1.1, 0.2]$

E.
$$m \in [1.5, 6.5]$$
 $b \in [9.9, 12.4]$

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

$$-9(-17x - 19) = -15(-8x - 5)$$

A.
$$x \in [-1.9, 1.1]$$

B.
$$x \in [-10.45, -6.45]$$

C.
$$x \in [7.45, 8.45]$$

D.
$$x \in [-4.91, -0.91]$$

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

$$-3(13x - 4) = -5(19x + 15)$$

A.
$$x \in [-1.19, -0.83]$$

B.
$$x \in [-0.58, -0.22]$$

C.
$$x \in [-1.79, -1.37]$$

D.
$$x \in [0.89, 1.13]$$

E. There are no real solutions.

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

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

- A. $x \in [-0.5, 1.7]$
- B. $x \in [-2.7, -0.6]$
- C. $x \in [-3.5, -2.1]$
- D. $x \in [-9.6, -5.5]$
- 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 9x + 5y = 8 and passing through the point (6, -9).

- A. $m \in [0.05, 1]$ $b \in [-15.8, -14]$
- B. $m \in [1.42, 2.17]$ $b \in [-13.8, -9.4]$
- C. $m \in [0.05, 1]$ $b \in [-13.8, -9.4]$
- D. $m \in [0.05, 1]$ $b \in [12, 13.1]$
- E. $m \in [-1.63, 0.2]$ $b \in [-8.6, -4.1]$
- 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 8x - 5y = 9 and passing through the point (8,6).

- A. $m \in [1.23, 2.72]$ $b \in [5.8, 9.8]$
- B. $m \in [1.23, 2.72]$ $b \in [-9.8, -5.8]$
- C. $m \in [0.08, 0.75]$ $b \in [-9.8, -5.8]$
- D. $m \in [-1.95, -0.76]$ $b \in [16.8, 21.8]$
- E. $m \in [1.23, 2.72]$ $b \in [-3, 3]$

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

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

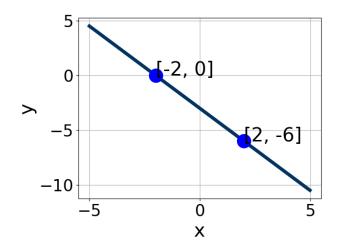
A.
$$x \in [-4.09, -2.67]$$

B.
$$x \in [-1.22, -0.29]$$

C.
$$x \in [-17.54, -16.44]$$

D.
$$x \in [-1.83, -1.14]$$

- 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. $A \in [2.84, 4.19], B \in [1.27, 2.29], \text{ and } C \in [-6.5, -4.8]$
- B. $A \in [1.08, 2.37], B \in [0.59, 1.23], \text{ and } C \in [-3.1, -2.6]$
- C. $A \in [-3.32, -2.01], B \in [-2.44, -1.82], \text{ and } C \in [5.9, 7.3]$
- D. $A \in [2.84, 4.19], B \in [-2.44, -1.82], \text{ and } C \in [5.9, 7.3]$
- E. $A \in [1.08, 2.37], B \in [-1.32, -0.95], \text{ and } C \in [1.1, 3.2]$

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