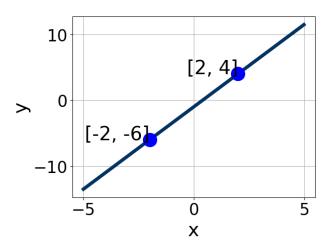
Progress Quiz 4

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.

$$(-2, -7)$$
 and $(7, 10)$

- A. $m \in [0.89, 3.89]$ $b \in [2.76, 3.1]$
- B. $m \in [-1.89, 1.11]$ $b \in [23, 23.5]$
- C. $m \in [0.89, 3.89]$ $b \in [-5.32, -4.82]$
- D. $m \in [0.89, 3.89]$ $b \in [3.02, 3.32]$
- E. $m \in [0.89, 3.89]$ $b \in [-3.45, -3]$
- 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. $A \in [1, 10], B \in [1.27, 2.23], \text{ and } C \in [-2.71, -1.47]$
- B. $A \in [1, 10], B \in [-2.99, -1.55], \text{ and } C \in [1.38, 2.2]$
- C. $A \in [-4.5, -0.5], B \in [-1.25, -0.06], \text{ and } C \in [0.82, 1.21]$
- D. $A \in [-4.5, -0.5], B \in [0.34, 1.84], \text{ and } C \in [-1.69, -0.67]$
- E. $A \in [-5, -3], B \in [1.27, 2.23], \text{ and } C \in [-2.71, -1.47]$
- 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.

$$(-10, -8)$$
 and $(11, -2)$

A.
$$m \in [0.24, 0.99]$$
 $b \in [-5.35, -5.1]$

B.
$$m \in [0.24, 0.99]$$
 $b \in [-13.11, -12.8]$

C.
$$m \in [-0.6, -0.22]$$
 $b \in [0.99, 1.38]$

D.
$$m \in [0.24, 0.99]$$
 $b \in [4.83, 5.41]$

E.
$$m \in [0.24, 0.99]$$
 $b \in [1.97, 2.57]$

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

$$-19(7x+9) = -8(13x+10)$$

A.
$$x \in [-2.06, 0.94]$$

B.
$$x \in [5.66, 11.66]$$

C.
$$x \in [-10.66, -5.66]$$

D.
$$x \in [-3.14, -2.14]$$

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

$$-12(9x+19) = -3(-11x-15)$$

A.
$$x \in [-2.2, -1.91]$$

B.
$$x \in [-2.77, -2.41]$$

C.
$$x \in [-1.62, -1.12]$$

D.
$$x \in [0.55, 2.03]$$

E. There are no real solutions.

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

$$\frac{-3x+8}{7} - \frac{-5x+6}{6} = \frac{-3x-6}{2}$$

- A. $x \in [-3.33, -2.39]$
- B. $x \in [-4.62, -3.66]$
- C. $x \in [-2.16, -0.87]$
- D. $x \in [-1.16, 0.11]$
- 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.

Parallel to 7x - 8y = 12 and passing through the point (-2, 6).

- A. $m \in [1.1, 1.8]$ $b \in [7.63, 7.77]$
- B. $m \in [0.03, 1.09]$ $b \in [-7.83, -7.4]$
- C. $m \in [-1.3, -0.76]$ $b \in [4.2, 4.36]$
- D. $m \in [0.03, 1.09]$ $b \in [7.78, 8.1]$
- E. $m \in [0.03, 1.09]$ $b \in [7.63, 7.77]$
- 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.

Perpendicular to 8x - 5y = 5 and passing through the point (5,3).

- A. $m \in [0.48, 1.26]$ $b \in [-0.4, 1]$
- B. $m \in [-1.55, -0.43]$ $b \in [-2.7, -0.9]$
- C. $m \in [-1.55, -0.43]$ $b \in [-9.2, -5.8]$
- D. $m \in [-3.08, -0.87]$ $b \in [4.7, 8.2]$
- E. $m \in [-1.55, -0.43]$ $b \in [4.7, 8.2]$

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

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

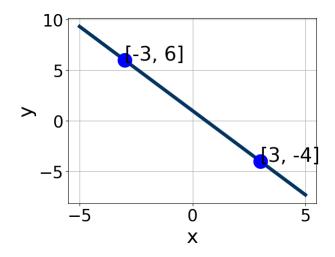
A.
$$x \in [-24.5, -21.5]$$

B.
$$x \in [-10.5, -6.5]$$

C.
$$x \in [-14, -10]$$

D.
$$x \in [-2.72, 2.28]$$

- 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.
$$A \in [-6.1, -4.5], B \in [-4.13, -2.59], \text{ and } C \in [-3.32, -2.14]$$

B.
$$A \in [-2.4, 3.4], B \in [-1.75, -0.21], \text{ and } C \in [-2.56, -0.54]$$

C.
$$A \in [3.4, 7.3], B \in [-4.13, -2.59], \text{ and } C \in [-3.32, -2.14]$$

D.
$$A \in [-2.4, 3.4], B \in [0.67, 1.02], \text{ and } C \in [-0.33, 1.41]$$

E.
$$A \in [3.4, 7.3], B \in [2.31, 3.82], \text{ and } C \in [1.33, 3.51]$$