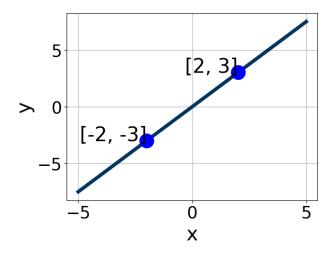
Progress Quiz 1

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. $A \in [0.6, 4.9], B \in [1.76, 2.67], and C \in [-3, 4]$
- B. $A \in [-4.9, -1.8], B \in [1.76, 2.67], \text{ and } C \in [-3, 4]$
- C. $A \in [0.6, 4.9], B \in [-2.59, -1.75], \text{ and } C \in [-3, 4]$
- D. $A \in [-2.9, 0.5], B \in [-0.39, 1.35], \text{ and } C \in [-3, 4]$
- E. $A \in [-2.9, 0.5], B \in [-1.73, -0.72], \text{ and } C \in [-3, 4]$
- 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.

Perpendicular to 6x + 7y = 7 and passing through the point (-5, -9).

- A. $m \in [1.1, 1.9]$ $b \in [-4.49, -3.25]$
- B. $m \in [1.1, 1.9]$ $b \in [2.38, 3.72]$
- C. $m \in [-1, 1.1]$ $b \in [-3.51, -2.36]$
- D. $m \in [1.1, 1.9]$ $b \in [-3.51, -2.36]$
- E. $m \in [-1.9, -1]$ $b \in [-14.96, -14.51]$

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

$$-3(5x - 7) = -2(-11x - 19)$$

A.
$$x \in [-2.59, -0.59]$$

B.
$$x \in [-0.41, 2.59]$$

C.
$$x \in [-8.43, -6.43]$$

D.
$$x \in [-1.46, 1.54]$$

- 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.

Parallel to 8x - 7y = 15 and passing through the point (-4, -8).

A.
$$m \in [1.01, 1.46]$$
 $b \in [-3.58, -3.34]$

B.
$$m \in [1.01, 1.46]$$
 $b \in [2.98, 3.57]$

C.
$$m \in [-1.19, -1.09]$$
 $b \in [-12.74, -12.01]$

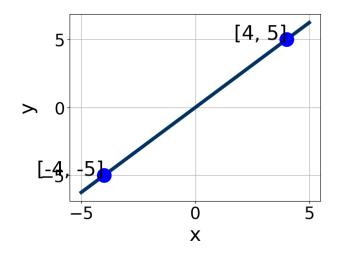
D.
$$m \in [1.01, 1.46]$$
 $b \in [-4.69, -3.53]$

E.
$$m \in [0.77, 0.99]$$
 $b \in [-3.58, -3.34]$

5. 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.

Progress Quiz 1

Version A



- A. $A \in [3, 8], B \in [-6, -3.9], \text{ and } C \in [-3, 6]$
- B. $A \in [-8, -3], B \in [3.2, 6.6], \text{ and } C \in [-3, 6]$
- C. $A \in [-2.25, 0.75], B \in [-2.8, -0.5], \text{ and } C \in [-3, 6]$
- D. $A \in [3, 8], B \in [3.2, 6.6], \text{ and } C \in [-3, 6]$
- E. $A \in [-2.25, 0.75], B \in [0.4, 3.3], \text{ and } C \in [-3, 6]$
- 6. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A. $x \in [-5.1, -3.3]$
- B. $x \in [-11.3, -9.6]$
- C. $x \in [-3.2, -1.2]$
- D. $x \in [-1.3, 0.2]$
- E. There are no real solutions.
- 7. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-10x - 9) = -18(-14x - 7)$$

A.
$$x \in [-1.05, -0.31]$$

B.
$$x \in [-0.28, 0.45]$$

C.
$$x \in [0.76, 2.33]$$

D.
$$x \in [-2.51, -1.31]$$

- E. There are no real solutions.
- 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 contain m and b.

$$(-11,9)$$
 and $(-9,-4)$

A.
$$m \in [-12.5, -3.5]$$
 $b \in [3, 6]$

B.
$$m \in [-12.5, -3.5]$$
 $b \in [59.5, 68.5]$

C.
$$m \in [-12.5, -3.5]$$
 $b \in [-63.5, -59.5]$

D.
$$m \in [2.5, 12.5]$$
 $b \in [51.5, 60.5]$

E.
$$m \in [-12.5, -3.5]$$
 $b \in [20, 29]$

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

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

A.
$$x \in [3.97, 7.97]$$

B.
$$x \in [32.6, 36.6]$$

C.
$$x \in [1.22, 3.22]$$

D.
$$x \in [-2.25, 1.75]$$

- 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.

$$(10,9)$$
 and $(6,-2)$

A.
$$m \in [-1.25, 3.75]$$
 $b \in [-12, -2]$

B.
$$m \in [-1.25, 3.75]$$
 $b \in [17.5, 20.5]$

C.
$$m \in [-6.75, -1.75]$$
 $b \in [10.5, 16.5]$

D.
$$m \in [-1.25, 3.75]$$
 $b \in [-3, 5]$

E.
$$m \in [-1.25, 3.75]$$
 $b \in [-19.5, -14.5]$