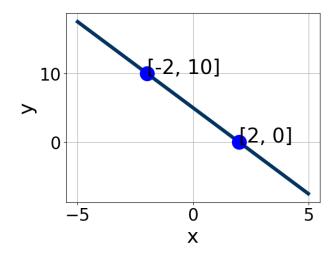
Progress Quiz 1

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. $A \in [5, 6], B \in [-2.93, -1.4], \text{ and } C \in [-17, -8]$
- B. $A \in [-6, -1], B \in [-2.93, -1.4], \text{ and } C \in [-17, -8]$
- C. $A \in [5, 6], B \in [1.71, 2.33], \text{ and } C \in [10, 14]$
- D. $A \in [-1.5, 3.5], B \in [0.77, 1.64], \text{ and } C \in [2, 6]$
- E. $A \in [-1.5, 3.5], B \in [-1.8, -0.31], \text{ and } C \in [-8, -2]$

2.

3. 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 (-9, -7).

- A. $m \in [-1.27, -1.11]$ $b \in [17, 18.1]$
- B. $m \in [-1.06, -0.59]$ $b \in [-19.3, -17.3]$
- C. $m \in [-1.27, -1.11]$ $b \in [-0.7, 2.6]$
- D. $m \in [-1.27, -1.11]$ $b \in [-19.3, -17.3]$
- E. $m \in [0.97, 1.63]$ $b \in [2.1, 3.7]$

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4. 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.

$$(-11, -4)$$
 and $(5, 3)$

A.
$$m \in [-0.09, 0.96]$$
 $b \in [-2.94, -1.61]$

B.
$$m \in [-0.09, 0.96]$$
 $b \in [-1.26, -0.33]$

C.
$$m \in [-0.09, 0.96]$$
 $b \in [6.06, 7.56]$

D.
$$m \in [-0.09, 0.96]$$
 $b \in [0.39, 1.44]$

E.
$$m \in [-1.75, -0.21]$$
 $b \in [3.58, 6.79]$

5.

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

$$-3(-18x + 2) = -13(-14x - 16)$$

A.
$$x \in [1.47, 1.64]$$

B.
$$x \in [1.3, 1.46]$$

C.
$$x \in [-0.99, -0.61]$$

D.
$$x \in [0.69, 1.06]$$

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

$$\frac{7x+3}{3} - \frac{3x-6}{2} = \frac{7x-9}{4}$$

A.
$$x \in [17.64, 22.64]$$

B.
$$x \in [4.82, 9.82]$$

- C. $x \in [-0.73, 1.27]$
- D. $x \in [1.08, 4.08]$
- E. There are no real solutions.

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