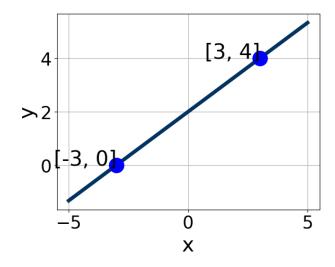
Progress Quiz 6

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. $A \in [-0.67, 0.33], B \in [-2.52, -0.91], \text{ and } C \in [-5.6, 0.9]$
- B. $A \in [-0.67, 0.33], B \in [0.93, 2.65], \text{ and } C \in [-0.4, 3.2]$
- C. $A \in [-3, -1], B \in [1.84, 3.16], \text{ and } C \in [4.5, 9.8]$
- D. $A \in [0,3], B \in [-3.7, -2.3], \text{ and } C \in [-6.3, -5.4]$
- E. $A \in [0, 3], B \in [1.84, 3.16], \text{ and } C \in [4.5, 9.8]$
- 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 3x + 4y = 15 and passing through the point (3, -2).

- A. $m \in [1.14, 1.87]$ $b \in [-6.48, -5.18]$
- B. $m \in [-1.93, -0.96]$ $b \in [1.1, 2.43]$
- C. $m \in [1.14, 1.87]$ $b \in [-5.47, -4.87]$
- D. $m \in [1.14, 1.87]$ $b \in [5.11, 7.08]$
- E. $m \in [0.61, 1.11]$ $b \in [-6.48, -5.18]$

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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 contain m and b.

$$(11,2)$$
 and $(6,6)$

A.
$$m \in [-1.06, 0.03]$$
 $b \in [-10.85, -10.16]$

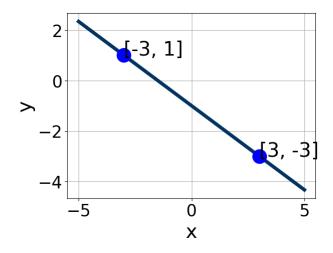
B.
$$m \in [-1.06, 0.03]$$
 $b \in [-9.81, -8.91]$

C.
$$m \in [-1.06, 0.03]$$
 $b \in [10.19, 11.58]$

D.
$$m \in [0.65, 1.18]$$
 $b \in [0.83, 1.78]$

E.
$$m \in [-1.06, 0.03]$$
 $b \in [-1.99, 0.9]$

4. 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.
$$A \in [-0.69, 0.72], B \in [-0.02, 1.44], \text{ and } C \in [-1.1, -0.4]$$

B.
$$A \in [1.1, 3.35], B \in [-3.02, -1.02], \text{ and } C \in [1.7, 5]$$

C.
$$A \in [-3.76, -1.16], B \in [-3.02, -1.02], \text{ and } C \in [1.7, 5]$$

D.
$$A \in [-0.69, 0.72], B \in [-1.53, -0.5], \text{ and } C \in [0.7, 2.2]$$

E.
$$A \in [1.1, 3.35], B \in [2.82, 3.42], \text{ and } C \in [-5.3, -2.6]$$

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

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solution.

$$-5(-10x+12) = -8(-4x+2)$$

A.
$$x \in [0.4, 1.4]$$

B.
$$x \in [2.1, 3.1]$$

C.
$$x \in [4, 5.2]$$

D.
$$x \in [-4.8, -3.6]$$

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

$$\frac{-6x-6}{5} - \frac{-3x+4}{2} = \frac{5x+3}{6}$$

A.
$$x \in [-2.9, -0.1]$$

B.
$$x \in [0.2, 1]$$

C.
$$x \in [-26.4, -20.7]$$

D.
$$x \in [-8, -5.6]$$

- E. There are no real solutions.
- 7. 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 $(5,-9)$

A.
$$m \in [-1, 0]$$
 $b \in [-14.9, -13.7]$

B.
$$m \in [0.5, 2]$$
 $b \in [-13.8, -11.7]$

C.
$$m \in [-1, 0]$$
 $b \in [-6.8, -1]$

D.
$$m \in [-1, 0]$$
 $b \in [10.8, 16.5]$

E.
$$m \in [-1, 0]$$
 $b \in [3.3, 6.9]$

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 5x+4y=10 and passing through the point (-10,10).

A.
$$m \in [0.25, 1.24]$$
 $b \in [-20.5, -16.7]$

B.
$$m \in [-1.57, 0.33]$$
 $b \in [0.3, 2.1]$

C.
$$m \in [0.25, 1.24]$$
 $b \in [14.6, 19]$

D.
$$m \in [0.25, 1.24]$$
 $b \in [18.4, 20.2]$

E.
$$m \in [0.93, 1.35]$$
 $b \in [14.6, 19]$

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

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

A.
$$x \in [0.1, 0.9]$$

B.
$$x \in [1.8, 2.9]$$

C.
$$x \in [8.1, 8.6]$$

D.
$$x \in [-2.8, -1.7]$$

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

$$-12(17x+5) = -4(-19x+10)$$

A.
$$x \in [-0.08, 0.19]$$

B.
$$x \in [-0.51, -0.33]$$

C.
$$x \in [0.13, 0.7]$$

D.
$$x \in [-1.06, -0.64]$$

E. There are no real solutions.