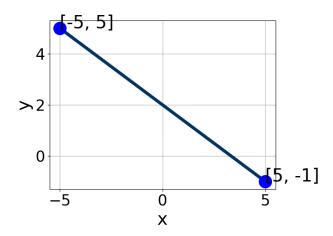
1. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [-1.3, 1.7], B \in [0.2, 3.1], \text{ and } C \in [1, 8]$
- B.  $A \in [-1.3, 1.7], B \in [-1.1, -0.2], \text{ and } C \in [-4, 0]$
- C.  $A \in [2.1, 4.2], B \in [-7.5, -4.9], \text{ and } C \in [-12, -8]$
- D.  $A \in [-7.1, -1.5], B \in [-7.5, -4.9], \text{ and } C \in [-12, -8]$
- E.  $A \in [2.1, 4.2], B \in [3.5, 6.6], \text{ and } C \in [9, 12]$
- 2. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(-14x - 2) = -19(15x + 12)$$

- A.  $x \in [0.48, 0.6]$
- B.  $x \in [-0.59, -0.54]$
- C.  $x \in [-0.51, -0.44]$
- D.  $x \in [-1.55, -1.31]$
- E. There are no real solutions.
- 3. Solve the linear equation below. Then, choose the interval that contains the solution.

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

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Progress Quiz 8

A. 
$$x \in [10.35, 14.35]$$

B. 
$$x \in [81.29, 83.29]$$

C. 
$$x \in [-1.32, 4.68]$$

D. 
$$x \in [21.19, 27.19]$$

- 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 4x + 7y = 8 and passing through the point (-4, -5).

A. 
$$m \in [-1.01, 0.15]$$
  $b \in [-2.5, 0.1]$ 

B. 
$$m \in [-1.01, 0.15]$$
  $b \in [7, 7.4]$ 

C. 
$$m \in [-1.89, -0.59]$$
  $b \in [-8.5, -4.9]$ 

D. 
$$m \in [0.51, 1.79]$$
  $b \in [-3.2, -1.8]$ 

E. 
$$m \in [-1.01, 0.15]$$
  $b \in [-8.5, -4.9]$ 

5. 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.

$$(-7,9)$$
 and  $(-2,7)$ 

A. 
$$m \in [-1.8, -0.22]$$
  $b \in [-6.28, -6.09]$ 

B. 
$$m \in [-1.8, -0.22]$$
  $b \in [8.45, 10.98]$ 

C. 
$$m \in [-1.8, -0.22]$$
  $b \in [6.1, 6.76]$ 

D. 
$$m \in [-1.8, -0.22]$$
  $b \in [15.07, 16.95]$ 

E. 
$$m \in [-0.19, 0.69]$$
  $b \in [6.87, 8.48]$ 

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

$$\frac{-3x+3}{2} - \frac{-7x+8}{6} = \frac{-5x+5}{4}$$

- A.  $x \in [-2.94, -1.05]$
- B.  $x \in [-0.57, 1.05]$
- C.  $x \in [10.05, 10.98]$
- D.  $x \in [0.99, 1.37]$
- 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 5x - 9y = 4 and passing through the point (-4, 5).

- A.  $m \in [-0.52, 1.08]$   $b \in [-9.22, -5.22]$
- B.  $m \in [1.23, 3]$   $b \in [6.22, 8.22]$
- C.  $m \in [-0.52, 1.08]$   $b \in [6.22, 8.22]$
- D.  $m \in [-1.4, 0.4]$   $b \in [-1.22, 5.78]$
- E.  $m \in [-0.52, 1.08]$   $b \in [9, 13]$
- 8. Solve the equation below. Then, choose the interval that contains the solution.

$$-5(14x+19) = -9(12x+6)$$

- A.  $x \in [-2.5, 0.8]$
- B.  $x \in [-0.1, 1.4]$
- C.  $x \in [3.7, 5.2]$
- D.  $x \in [-4.3, -3.8]$
- E. There are no real solutions.

9. 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  $(9, -5)$ 

A. 
$$m \in [-4, -3]$$
  $b \in [-31, -25]$ 

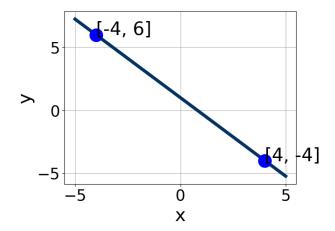
B. 
$$m \in [-4, -3]$$
  $b \in [-15, -9]$ 

C. 
$$m \in [-4, -3]$$
  $b \in [-22, -17]$ 

D. 
$$m \in [-4, -3]$$
  $b \in [26, 36]$ 

E. 
$$m \in [2, 5]$$
  $b \in [-44, -39]$ 

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.  $A \in [0.2, 2.2], B \in [-1.27, 0.39], \text{ and } C \in [-2.27, -0.83]$
- B.  $A \in [3.9, 8.7], B \in [3.97, 5.85], \text{ and } C \in [3.12, 5.47]$
- C.  $A \in [0.2, 2.2], B \in [-0.05, 2.33], \text{ and } C \in [-0.55, 1.05]$
- D.  $A \in [3.9, 8.7], B \in [-4.23, -3.27], \text{ and } C \in [-4.44, -3.8]$
- E.  $A \in [-8.2, -3.5], B \in [-4.23, -3.27], \text{ and } C \in [-4.44, -3.8]$

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