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

$$-5(16x+11) = -3(-7x+15)$$

- A.  $x \in [-1.71, -1.34]$
- B.  $x \in [-0.79, 0.08]$
- C.  $x \in [-1.43, -0.56]$
- D.  $x \in [0.95, 1.56]$
- E. There are no real solutions.
- 2. Solve the equation below. Then, choose the interval that contains the solution.

$$-2(-12x+15) = -17(7x+13)$$

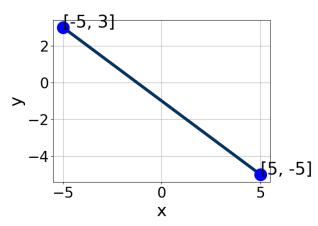
- A.  $x \in [-1.52, -0.99]$
- B.  $x \in [-1.96, -1.43]$
- C.  $x \in [1.34, 2.24]$
- D.  $x \in [-3, -2.58]$
- E. There are no real solutions.
- 3. First, find the equation of the line containing the two points below. Then, write the equation as y = mx + b and choose the intervals that contain m and b.

$$(2, -7)$$
 and  $(-8, 11)$ 

- A.  $m \in [-3.8, 0.2]$   $b \in [-5.4, 2.6]$
- B.  $m \in [-3.8, 0.2]$   $b \in [-16, -7]$
- C.  $m \in [0.8, 6.8]$   $b \in [23.4, 28.4]$
- D.  $m \in [-3.8, 0.2]$   $b \in [15, 20]$
- E.  $m \in [-3.8, 0.2]$   $b \in [3.4, 4.4]$

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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.  $A \in [-6.9, -2.4], B \in [-6.4, -4.7], \text{ and } C \in [3.2, 5.8]$
- B.  $A \in [2.4, 4.7], B \in [2.6, 7.6], \text{ and } C \in [-8.7, -4.7]$
- C.  $A \in [2.4, 4.7], B \in [-6.4, -4.7], \text{ and } C \in [3.2, 5.8]$
- D.  $A \in [0.7, 1.7], B \in [-0.2, 2.1], \text{ and } C \in [-3.7, 0.5]$
- E.  $A \in [0.7, 1.7], B \in [-1.5, 0.9], \text{ and } C \in [0, 4.4]$
- 5. Solve the linear equation below. Then, choose the interval that contains the solution.

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

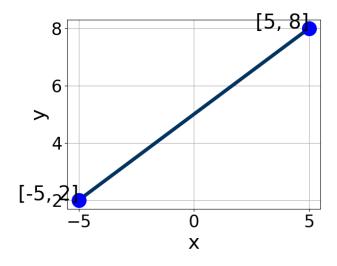
- A.  $x \in [36.8, 38.8]$
- B.  $x \in [2.85, 5.85]$
- C.  $x \in [0.5, 2.5]$
- D.  $x \in [6.45, 9.45]$
- E. There are no real solutions.
- 6. Find the equation of the line described below. Write the linear equation as y = mx + b and choose the intervals that contain m and b.

Parallel to 5x - 6y = 10 and passing through the point (-4, 5).

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Progress Quiz 4

- A.  $m \in [-1.18, -0.31]$   $b \in [0.17, 1.74]$
- B.  $m \in [0.59, 0.97]$   $b \in [8.39, 9.99]$
- C.  $m \in [0.59, 0.97]$   $b \in [7.88, 8.83]$
- D.  $m \in [0.59, 0.97]$   $b \in [-9.33, -7.16]$
- E.  $m \in [1.16, 1.33]$   $b \in [7.88, 8.83]$
- 7. 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.  $A \in [2.6, 3.6], B \in [4.94, 5.13], and C \in [20, 27]$
- B.  $A \in [2.6, 3.6], B \in [-5.8, -3.2], \text{ and } C \in [-26, -18]$
- C.  $A \in [-1.9, 2.2], B \in [-1.49, 0.32], \text{ and } C \in [-6, -1]$
- D.  $A \in [-3.2, -0.7], B \in [4.94, 5.13], \text{ and } C \in [20, 27]$
- E.  $A \in [-1.9, 2.2], B \in [-0.19, 1.47], \text{ and } C \in [-1, 11]$
- 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.

Parallel to 4x + 7y = 12 and passing through the point (-10, 2).

A.  $m \in [-1.3, 0.1]$   $b \in [10, 14]$ 

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B. 
$$m \in [-1.3, 0.1]$$
  $b \in [-4.71, 0.29]$ 

C. 
$$m \in [-1.3, 0.1]$$
  $b \in [1.71, 4.71]$ 

D. 
$$m \in [0, 1.3]$$
  $b \in [7.71, 8.71]$ 

E. 
$$m \in [-3.2, -0.8]$$
  $b \in [-4.71, 0.29]$ 

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

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

A. 
$$x \in [-9.38, -2.38]$$

B. 
$$x \in [-16.48, -9.48]$$

C. 
$$x \in [1.31, 2.31]$$

D. 
$$x \in [-0.64, 0.36]$$

- 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.

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

A. 
$$m \in [-1.08, -0.59]$$
  $b \in [-8.45, -7.57]$ 

B. 
$$m \in [-1.08, -0.59]$$
  $b \in [-1.12, -0.58]$ 

C. 
$$m \in [-1.08, -0.59]$$
  $b \in [7.28, 8.27]$ 

D. 
$$m \in [-1.08, -0.59]$$
  $b \in [14.41, 15.21]$ 

E. 
$$m \in [0.46, 1.05]$$
  $b \in [13.91, 14.85]$