1. 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.

$$(8, -11)$$
 and  $(-2, 9)$ 

- A.  $m \in [-4, -1]$   $b \in [-5.46, -4.84]$
- B.  $m \in [2, 5]$   $b \in [11.32, 13.22]$
- C.  $m \in [-4, -1]$   $b \in [-19.03, -18.73]$
- D.  $m \in [-4, -1]$   $b \in [3.74, 6.39]$
- E.  $m \in [-4, -1]$   $b \in [10.86, 12.91]$
- 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.

Parallel to 8x - 9y = 7 and passing through the point (-8, -7).

- A.  $m \in [0.7, 0.94]$   $b \in [-0.03, 0.36]$
- B.  $m \in [1.1, 2]$   $b \in [-0.03, 0.36]$
- C.  $m \in [-0.91, -0.61]$   $b \in [-14.12, -14.03]$
- D.  $m \in [0.7, 0.94]$   $b \in [-0.26, 0.01]$
- E.  $m \in [0.7, 0.94]$   $b \in [0.55, 1.14]$
- 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.

Parallel to 8x + 7y = 3 and passing through the point (-8, -9).

- A.  $m \in [-1.31, -1.04]$   $b \in [15.14, 23.14]$
- B.  $m \in [-1.31, -1.04]$   $b \in [-20.14, -13.14]$
- C.  $m \in [1, 1.15]$   $b \in [-0.86, 2.14]$
- D.  $m \in [-1.31, -1.04]$   $b \in [-3, 0]$
- E.  $m \in [-0.94, -0.58]$   $b \in [-20.14, -13.14]$

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.

$$(2,-5)$$
 and  $(7,10)$ 

A. 
$$m \in [1,7]$$
  $b \in [-16, -9]$ 

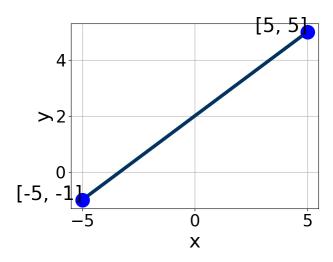
B. 
$$m \in [1, 7]$$
  $b \in [8, 15]$ 

C. 
$$m \in [-11, 1]$$
  $b \in [25, 38]$ 

D. 
$$m \in [1,7]$$
  $b \in [-9,0]$ 

E. 
$$m \in [1, 7]$$
  $b \in [-3, 4]$ 

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.



A. 
$$A \in [2.3, 3.6], B \in [4.54, 6.34], \text{ and } C \in [8.6, 10.8]$$

B. 
$$A \in [2.3, 3.6], B \in [-6.2, -4.41], \text{ and } C \in [-12.2, -9.5]$$

C. 
$$A \in [-1.8, 0.1], B \in [-0.26, 1.69], \text{ and } C \in [1.6, 3.9]$$

D. 
$$A \in [-1.8, 0.1], B \in [-2.41, 0.59], \text{ and } C \in [-3.7, -1.9]$$

E. 
$$A \in [-5.5, -0.8], B \in [4.54, 6.34], \text{ and } C \in [8.6, 10.8]$$

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

$$-14(-18x - 17) = -8(6x + 2)$$

- A.  $x \in [-1.16, -0.98]$
- B.  $x \in [0.71, 0.82]$
- C.  $x \in [-0.95, -0.78]$
- D.  $x \in [-0.84, -0.69]$
- E. There are no real solutions.
- 7. Solve the linear equation below. Then, choose the interval that contains the solution.

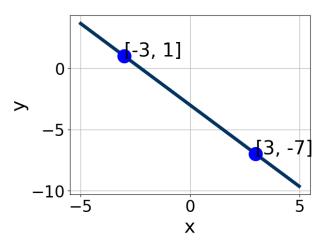
$$\frac{-3x-3}{7} - \frac{4x-7}{6} = \frac{-4x+5}{4}$$

- A.  $x \in [-10.5, -8.5]$
- B.  $x \in [-2.17, 1.83]$
- C.  $x \in [-6.38, -4.38]$
- D.  $x \in [-30.88, -26.88]$
- E. There are no real solutions.
- 8. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{9x+6}{5} - \frac{-5x+6}{6} = \frac{9x+3}{4}$$

- A.  $x \in [-1.5, 0.3]$
- B.  $x \in [-4.1, -2.3]$
- C.  $x \in [6.5, 8.7]$
- D.  $x \in [0.5, 2]$
- E. There are no real solutions.

9. 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. 
$$A \in [3.7, 4.7], B \in [-4.92, -2.14], \text{ and } C \in [9, 11]$$

B. 
$$A \in [0.5, 3.7], B \in [0.7, 2.07], \text{ and } C \in [-3, 0]$$

C. 
$$A \in [3.7, 4.7], B \in [2.89, 4.99], \text{ and } C \in [-11, -6]$$

D. 
$$A \in [-4.4, -2.6], B \in [-4.92, -2.14], \text{ and } C \in [9, 11]$$

E. 
$$A \in [0.5, 3.7], B \in [-1.5, 0.65], \text{ and } C \in [2, 5]$$

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

$$-19(-10x+6) = -8(13x-2)$$

A. 
$$x \in [0.18, 0.41]$$

B. 
$$x \in [0.34, 0.83]$$

C. 
$$x \in [1.11, 1.55]$$

D. 
$$x \in [-0.82, 0.17]$$

E. There are no real solutions.