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

$$-17(8x+19) = -3(7x+4)$$

- A.  $x \in [-2.94, -2.77]$
- B.  $x \in [-2.43, -1.77]$
- C.  $x \in [-2.82, -2.7]$
- D.  $x \in [2.65, 3.32]$
- E. There are no real solutions.
- 2. 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.

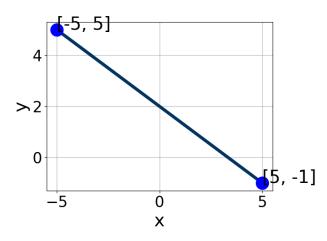
$$(-11,8)$$
 and  $(-3,-10)$ 

- A.  $m \in [-3.25, -1.25]$   $b \in [-8, -5]$
- B.  $m \in [-3.25, -1.25]$   $b \in [19, 22]$
- C.  $m \in [-3.25, -1.25]$   $b \in [10.75, 17.75]$
- D.  $m \in [-3.25, -1.25]$   $b \in [-19.75, -10.75]$
- E.  $m \in [2.25, 3.25]$   $b \in [-5.25, -0.25]$
- 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.

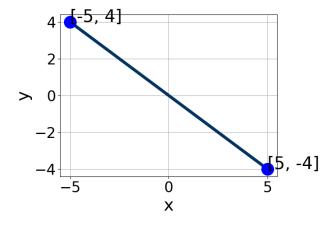
Parallel to 4x - 9y = 4 and passing through the point (4, -9).

- A.  $m \in [1.68, 3.26]$   $b \in [-11.78, -8.78]$
- B.  $m \in [-0.34, 1.17]$   $b \in [8.78, 15.78]$
- C.  $m \in [-1.16, 0.19]$   $b \in [-8.22, -6.22]$
- D.  $m \in [-0.34, 1.17]$   $b \in [-14, -11]$
- E.  $m \in [-0.34, 1.17]$   $b \in [-11.78, -8.78]$

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.  $A \in [-5.6, -1.2], B \in [-5.77, -4.68], \text{ and } C \in [-10, -3]$
- B.  $A \in [2.7, 6.5], B \in [4.47, 5.8], \text{ and } C \in [7, 13]$
- C.  $A \in [-0.6, 1.2], B \in [0.82, 2.26], \text{ and } C \in [0, 6]$
- D.  $A \in [2.7, 6.5], B \in [-5.77, -4.68], \text{ and } C \in [-10, -3]$
- E.  $A \in [-0.6, 1.2], B \in [-1.91, 0.15], \text{ and } C \in [-9, 1]$
- 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.  $A \in [1, 7], B \in [4, 5.99], \text{ and } C \in [-2, 3]$ 

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B. 
$$A \in [-2.2, 2.8], B \in [0.71, 2.09], \text{ and } C \in [-2, 3]$$

C. 
$$A \in [1, 7], B \in [-5.96, -3.24], \text{ and } C \in [-2, 3]$$

D. 
$$A \in [-2.2, 2.8], B \in [-1.33, 0.02], \text{ and } C \in [-2, 3]$$

E. 
$$A \in [-7, -2], B \in [-5.96, -3.24], \text{ and } C \in [-2, 3]$$

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

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

A. 
$$x \in [-1.2, 0.5]$$

B. 
$$x \in [-132.4, -131.5]$$

C. 
$$x \in [-27.3, -25.7]$$

D. 
$$x \in [-0.7, 0.9]$$

- 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 8x + 3y = 3 and passing through the point (-2, -7).

A. 
$$m \in [-3.1, -1.5]$$
  $b \in [12.33, 14.33]$ 

B. 
$$m \in [-3.1, -1.5]$$
  $b \in [-14.33, -9.33]$ 

C. 
$$m \in [0.5, 5]$$
  $b \in [-1.67, 0.33]$ 

D. 
$$m \in [-3.1, -1.5]$$
  $b \in [-9, -4]$ 

E. 
$$m \in [-1.1, 0.5]$$
  $b \in [-14.33, -9.33]$ 

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

$$-9(-16x+7) = -12(-6x-10)$$

A. 
$$x \in [0.72, 0.89]$$

B. 
$$x \in [-0.88, -0.68]$$

C. 
$$x \in [-0.7, -0.25]$$

D. 
$$x \in [2.29, 3.12]$$

- 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.

$$(8,6)$$
 and  $(6,5)$ 

A. 
$$m \in [-0.49, 1.04]$$
  $b \in [-2.5, -1.4]$ 

B. 
$$m \in [-0.49, 1.04]$$
  $b \in [-2.5, -1.4]$ 

C. 
$$m \in [-0.49, 1.04]$$
  $b \in [1, 4.5]$ 

D. 
$$m \in [-0.49, 1.04]$$
  $b \in [-1.6, -0.3]$ 

E. 
$$m \in [-1.51, -0.45]$$
  $b \in [6.5, 8.8]$ 

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

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

A. 
$$x \in [-4.5, -2.5]$$

B. 
$$x \in [-9.17, -4.17]$$

C. 
$$x \in [-1.88, 1.12]$$

D. 
$$x \in [-14, -8]$$

E. There are no real solutions.