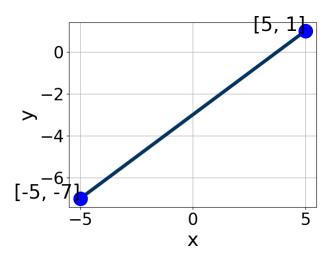
1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x+9}{6} - \frac{8x+5}{3} = \frac{-6x-8}{5}$$

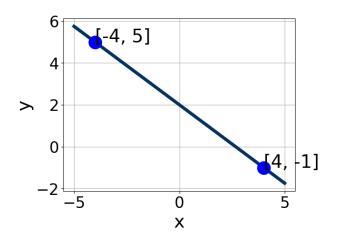
- A.  $x \in [-2.29, 1.71]$
- B.  $x \in [1.78, 6.78]$
- C.  $x \in [39, 42]$
- D.  $x \in [13.89, 16.89]$
- E. There are no real solutions.
- 2. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [3.21, 5.04], B \in [-5.2, -4.6], \text{ and } C \in [14, 22]$
- B.  $A \in [3.21, 5.04], B \in [4.1, 5.1], \text{ and } C \in [-17, -10]$
- C.  $A \in [-1.23, -0.29], B \in [0.9, 2.1], \text{ and } C \in [-4, 1]$
- D.  $A \in [-4.1, -3.44], B \in [4.1, 5.1], \text{ and } C \in [-17, -10]$
- E.  $A \in [-1.23, -0.29], B \in [-2.7, 0.2], \text{ and } C \in [-1, 4]$
- 3. 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.

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- A.  $A \in [-5, -0.7], B \in [-4.2, -3.2], \text{ and } C \in [-8.2, -5.9]$
- B.  $A \in [2.6, 3.5], B \in [-4.2, -3.2], \text{ and } C \in [-8.2, -5.9]$
- C.  $A \in [-2.4, 2.1], B \in [0.76, 3.5], \text{ and } C \in [0.2, 2.1]$
- D.  $A \in [-2.4, 2.1], B \in [-1.18, -0.31], \text{ and } C \in [-3.8, -0.2]$
- E.  $A \in [2.6, 3.5], B \in [3.15, 4.91], \text{ and } C \in [7.5, 8.9]$

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

$$-5(-4x-2) = -11(-12x+14)$$

- A.  $x \in [1.21, 1.3]$
- B.  $x \in [-1.4, -1.25]$
- C.  $x \in [0.93, 1.04]$
- D.  $x \in [1.46, 1.55]$
- E. There are no real solutions.
- 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.

$$(-11,4)$$
 and  $(2,-3)$ 

A.  $m \in [-2, 0.5]$   $b \in [1.42, 2.11]$ 

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B. 
$$m \in [-2, 0.5]$$
  $b \in [14.36, 15.3]$ 

C. 
$$m \in [-2, 0.5]$$
  $b \in [-2.67, -1.25]$ 

D. 
$$m \in [0.4, 2.6]$$
  $b \in [-4.08, -3.84]$ 

E. 
$$m \in [-2, 0.5]$$
  $b \in [-5.41, -4.34]$ 

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

$$-14(17x - 18) = -16(9x + 19)$$

A. 
$$x \in [-0.3, -0.07]$$

B. 
$$x \in [5.62, 6.41]$$

C. 
$$x \in [-1.17, -0.47]$$

D. 
$$x \in [0.42, 0.98]$$

- 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.

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

A. 
$$m \in [-0.24, 0.03]$$
  $b \in [-2.5, 2.3]$ 

B. 
$$m \in [-0.24, 0.03]$$
  $b \in [-9.3, -7.4]$ 

C. 
$$m \in [0.04, 0.4]$$
  $b \in [-7.4, -7]$ 

D. 
$$m \in [-0.24, 0.03]$$
  $b \in [6.1, 9.6]$ 

E. 
$$m \in [-0.24, 0.03]$$
  $b \in [-20.2, -19.7]$ 

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 3x - 8y = 5 and passing through the point (5,6).

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A. 
$$m \in [-0.05, 0.52]$$
  $b \in [4.12, 5.12]$ 

B. 
$$m \in [-0.4, 0.35]$$
  $b \in [5.88, 10.88]$ 

C. 
$$m \in [-0.05, 0.52]$$
  $b \in [-5.12, -3.12]$ 

D. 
$$m \in [1.94, 2.71]$$
  $b \in [4.12, 5.12]$ 

E. 
$$m \in [-0.05, 0.52]$$
  $b \in [-2, 3]$ 

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

$$\frac{-3x+9}{2} - \frac{-4x-6}{5} = \frac{-5x+4}{4}$$

A. 
$$x \in [-9.1, -7.6]$$

B. 
$$x \in [-2.6, 1.1]$$

C. 
$$x \in [-5.7, -3]$$

D. 
$$x \in [-20.6, -17.8]$$

- E. There are no real solutions.
- 10. 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, 5).

A. 
$$m \in [-1.01, -0.46]$$
  $b \in [-2.71, 1.29]$ 

B. 
$$m \in [0.5, 1.21]$$
  $b \in [14, 17]$ 

C. 
$$m \in [0.5, 1.21]$$
  $b \in [-11.71, -9.71]$ 

D. 
$$m \in [0.5, 1.21]$$
  $b \in [10.71, 13.71]$ 

E. 
$$m \in [1.58, 2.47]$$
  $b \in [10.71, 13.71]$