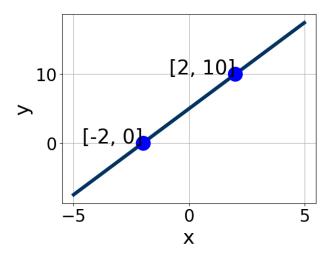
1. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A.  $A \in [3.1, 5.2], B \in [-2.31, -1.18], \text{ and } C \in [-10, -7]$
- B.  $A \in [-3.7, -2.4], B \in [-1.2, -0.85], \text{ and } C \in [-6, -2]$
- C.  $A \in [3.1, 5.2], B \in [1.6, 2.12], \text{ and } C \in [6, 11]$
- D.  $A \in [-6.7, -3.4], B \in [1.6, 2.12], \text{ and } C \in [6, 11]$
- E.  $A \in [-3.7, -2.4], B \in [0.58, 1.57], \text{ and } C \in [3, 6]$
- 2. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A.  $x \in [0.88, 2.07]$
- B.  $x \in [6.57, 7.73]$
- C.  $x \in [-1.51, -0.61]$
- D.  $x \in [-0.43, 1.56]$
- E. There are no real solutions.
- 3. Solve the equation below. Then, choose the interval that contains the

solution.

$$-5(-7x+4) = -17(3x+11)$$

A. 
$$x \in [-2.95, -2.23]$$

B. 
$$x \in [-2.19, -1.35]$$

C. 
$$x \in [-13.69, -12.92]$$

D. 
$$x \in [1.5, 2.69]$$

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.

Perpendicular to 9x+5y=15 and passing through the point (-5,-9).

A. 
$$m \in [0.25, 1.11]$$
  $b \in [4.22, 9.22]$ 

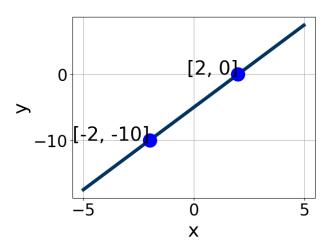
B. 
$$m \in [0.25, 1.11]$$
  $b \in [-8.22, -5.22]$ 

C. 
$$m \in [-1.22, -0.01]$$
  $b \in [-13.78, -7.78]$ 

D. 
$$m \in [1.37, 2.98]$$
  $b \in [-8.22, -5.22]$ 

E. 
$$m \in [0.25, 1.11]$$
  $b \in [-4, 1]$ 

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. 
$$A \in [-4, 0.2], B \in [-1.01, -0.42], \text{ and } C \in [3, 7.6]$$

B. 
$$A \in [-4, 0.2], B \in [-0.04, 1.63], \text{ and } C \in [-6.1, -3.8]$$

C. 
$$A \in [-6.2, -4.5], B \in [1.89, 2.65], \text{ and } C \in [-10.4, -7]$$

D. 
$$A \in [4.2, 6.9], B \in [1.89, 2.65], \text{ and } C \in [-10.4, -7]$$

E. 
$$A \in [4.2, 6.9], B \in [-2.84, -1.35], \text{ and } C \in [9, 11.6]$$

6. 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.

$$(9, -3)$$
 and  $(3, 5)$ 

A. 
$$m \in [-13.33, 0.67]$$
  $b \in [-10.31, -7.79]$ 

B. 
$$m \in [-13.33, 0.67]$$
  $b \in [-12.58, -10.87]$ 

C. 
$$m \in [1.33, 4.33]$$
  $b \in [0.44, 1.27]$ 

D. 
$$m \in [-13.33, 0.67]$$
  $b \in [8.18, 9.67]$ 

E. 
$$m \in [-13.33, 0.67]$$
  $b \in [1.49, 2.97]$ 

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

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

A. 
$$x \in [-0.2, 1.5]$$

B. 
$$x \in [1.6, 3.2]$$

C. 
$$x \in [-1.8, -0.9]$$

D. 
$$x \in [8.7, 13.3]$$

E. There are no real solutions.

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

$$-12(6x+18) = -2(-3x+9)$$

- A.  $x \in [-3.57, -3.31]$
- B.  $x \in [-3.04, -2.93]$
- C.  $x \in [-2.94, -2.47]$
- D.  $x \in [2.86, 3.53]$
- E. There are no real solutions.
- 9. 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 = 6 and passing through the point (4, -10).

- A.  $m \in [0.72, 0.97]$   $b \in [-13.58, -13.24]$
- B.  $m \in [-1.15, -0.77]$   $b \in [-6.8, -6.2]$
- C.  $m \in [-1.15, -0.77]$   $b \in [6.47, 6.88]$
- D.  $m \in [-1.6, -1.08]$   $b \in [-6.8, -6.2]$
- E.  $m \in [-1.15, -0.77]$   $b \in [-14.06, -13.78]$
- 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.

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

- A.  $m \in [-0.88, -0.19]$   $b \in [2.94, 8.94]$
- B.  $m \in [-0.88, -0.19]$   $b \in [15, 17]$
- C.  $m \in [-0.88, -0.19]$   $b \in [-7, -6]$
- D.  $m \in [-0.88, -0.19]$   $b \in [-5.94, -0.94]$
- E.  $m \in [0.42, 0.79]$   $b \in [9.06, 13.06]$