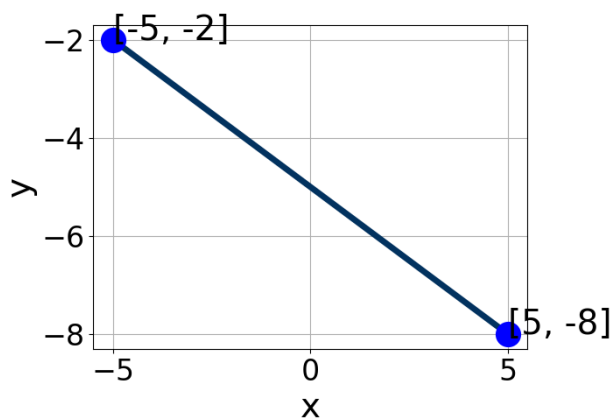


1. Write the equation of the line in the graph below in Standard form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [0.2, 1.2]$ ,  $B \in [-4.6, 0.3]$ , and  $C \in [1, 6]$   
B.  $A \in [1.5, 4.1]$ ,  $B \in [3.3, 6.4]$ , and  $C \in [-26, -22]$   
C.  $A \in [1.5, 4.1]$ ,  $B \in [-5.6, -3.3]$ , and  $C \in [23, 30]$   
D.  $A \in [-5.1, 0.1]$ ,  $B \in [-5.6, -3.3]$ , and  $C \in [23, 30]$   
E.  $A \in [0.2, 1.2]$ ,  $B \in [0.6, 3.9]$ , and  $C \in [-8, -1]$

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

$$-2(8x + 10) = -15(-16x + 19)$$

- A.  $x \in [0.84, 1.11]$   
B.  $x \in [1.17, 1.23]$   
C.  $x \in [1.24, 1.47]$   
D.  $x \in [-1.22, -1.11]$   
E. There are no real solutions.

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

$$-4(-15x + 16) = -3(5x + 13)$$

- A.  $x \in [1.35, 1.79]$
  - B.  $x \in [1.88, 2.83]$
  - C.  $x \in [-2.09, -0.66]$
  - D.  $x \in [-0.63, 0.39]$
  - 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  $b$ .

Parallel to  $4x - 7y = 13$  and passing through the point  $(-9, -3)$ .

- A.  $m \in [0.79, 2.64]$   $b \in [1.4, 3.2]$
  - B.  $m \in [-0.03, 1.18]$   $b \in [4.8, 6.4]$
  - C.  $m \in [-0.03, 1.18]$   $b \in [-4.2, -1.9]$
  - D.  $m \in [-0.72, 0.26]$   $b \in [-11.3, -6.9]$
  - E.  $m \in [-0.03, 1.18]$   $b \in [1.4, 3.2]$
- 

5. 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  $7x - 8y = 8$  and passing through the point  $(-9, 7)$ .

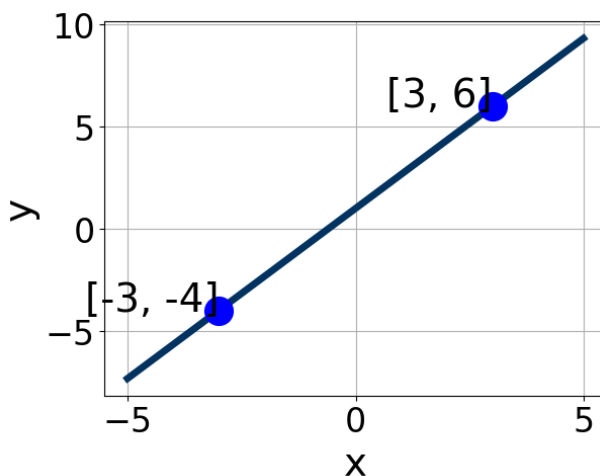
- A.  $m \in [-1.52, -1.14]$   $b \in [-4.2, -2.4]$
  - B.  $m \in [0.78, 1.51]$   $b \in [17.1, 17.9]$
  - C.  $m \in [-1.52, -1.14]$   $b \in [14.3, 17]$
  - D.  $m \in [-1.52, -1.14]$   $b \in [3.1, 4.1]$
  - E.  $m \in [-1.03, -0.86]$   $b \in [-4.2, -2.4]$
-

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  $b$ .

$$(10, -2) \text{ and } (-10, 5)$$

- A.  $m \in [-1.26, 0.18]$   $b \in [12, 21]$   
B.  $m \in [0.34, 1.09]$   $b \in [5.5, 9.5]$   
C.  $m \in [-1.26, 0.18]$   $b \in [-16, -7]$   
D.  $m \in [-1.26, 0.18]$   $b \in [-2.5, -0.5]$   
E.  $m \in [-1.26, 0.18]$   $b \in [-0.5, 3.5]$
- 

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.  $A \in [4, 11]$ ,  $B \in [2.04, 4.5]$ , and  $C \in [2.44, 3.39]$   
B.  $A \in [4, 11]$ ,  $B \in [-3.74, -2.11]$ , and  $C \in [-5.31, -1.46]$   
C.  $A \in [-4.67, 1.33]$ ,  $B \in [0.56, 1.52]$ , and  $C \in [0.6, 1.24]$   
D.  $A \in [-6, -2]$ ,  $B \in [2.04, 4.5]$ , and  $C \in [2.44, 3.39]$   
E.  $A \in [-4.67, 1.33]$ ,  $B \in [-1.1, -0.48]$ , and  $C \in [-1.62, -0.58]$
-

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

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

- A.  $x \in [1.18, 2.06]$
  - B.  $x \in [6.93, 7.83]$
  - C.  $x \in [-1.33, -0.38]$
  - D.  $x \in [-1.31, 0.5]$
  - E. There are no real solutions.
- 

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

$$\frac{-4x + 4}{7} - \frac{-5x - 3}{2} = \frac{7x - 9}{6}$$

- A.  $x \in [-1, 0.5]$
  - B.  $x \in [-23.4, -20.9]$
  - C.  $x \in [-5.9, -3.7]$
  - D.  $x \in [-0.6, 2.8]$
  - 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  $b$ .

$$(10, -7) \text{ and } (11, 9)$$

- A.  $m \in [-17, -11]$   $b \in [185, 190]$
- B.  $m \in [16, 22]$   $b \in [162, 169]$
- C.  $m \in [16, 22]$   $b \in [-172, -159]$
- D.  $m \in [16, 22]$   $b \in [-20, -10]$
- E.  $m \in [16, 22]$   $b \in [-4, 1]$

