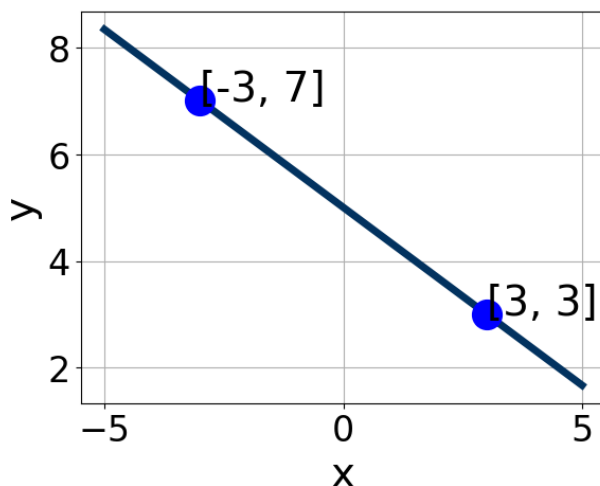


1. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A.  $x \in [-4.3, -3.7]$
  - B.  $x \in [-19.7, -15.6]$
  - C.  $x \in [-2.1, 1]$
  - D.  $x \in [-6.3, -5.2]$
  - 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.  $A \in [0.94, 3.08]$ ,  $B \in [1.74, 3.82]$ , and  $C \in [14, 17]$
  - B.  $A \in [-2.12, 0.01]$ ,  $B \in [-3.47, -2.28]$ , and  $C \in [-17, -11]$
  - C.  $A \in [0.94, 3.08]$ ,  $B \in [-3.47, -2.28]$ , and  $C \in [-17, -11]$
  - D.  $A \in [-0.55, 1.4]$ ,  $B \in [-1.53, -0.25]$ , and  $C \in [-5, 0]$
  - E.  $A \in [-0.55, 1.4]$ ,  $B \in [0.51, 1.44]$ , and  $C \in [1, 7]$
- 

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

solution.

$$-15(-10x + 11) = -5(-9x + 13)$$

- A.  $x \in [0.68, 1.1]$
- B.  $x \in [1, 1.55]$
- C.  $x \in [1.64, 2.34]$
- D.  $x \in [-2.42, -1.74]$
- E. There are no real solutions.

- 
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  $b$ .

$$(-10, 4) \text{ and } (4, -11)$$

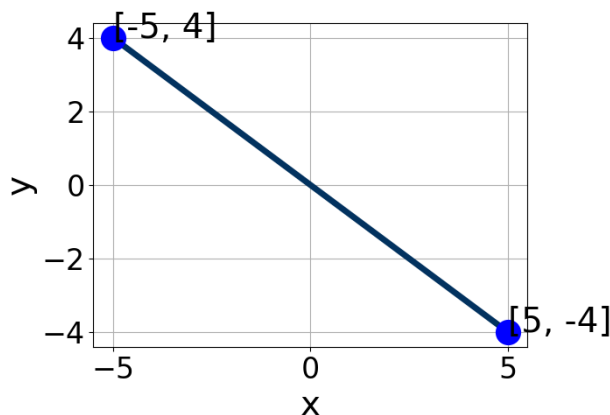
- A.  $m \in [-4.5, 0.4]$   $b \in [-7.28, -6.11]$
- B.  $m \in [-4.5, 0.4]$   $b \in [6.37, 7.69]$
- C.  $m \in [-4.5, 0.4]$   $b \in [-15.23, -14.5]$
- D.  $m \in [-4.5, 0.4]$   $b \in [13.91, 14.41]$
- E.  $m \in [-1, 2.8]$   $b \in [-15.63, -15.07]$

- 
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  $b$ .

$$(5, 5) \text{ and } (-10, 7)$$

- A.  $m \in [-0.77, -0.06]$   $b \in [13.8, 18]$
- B.  $m \in [-0.77, -0.06]$   $b \in [-1.3, 1.6]$
- C.  $m \in [-0.77, -0.06]$   $b \in [3.8, 7.3]$
- D.  $m \in [-0.77, -0.06]$   $b \in [-9.4, -5]$
- E.  $m \in [0.01, 0.77]$   $b \in [8.1, 9.1]$

6. 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.  $A \in [-8, -3]$ ,  $B \in [-6.1, -4.2]$ , and  $C \in [-3, 5]$   
B.  $A \in [0.8, 2.8]$ ,  $B \in [0.6, 2.4]$ , and  $C \in [-3, 5]$   
C.  $A \in [3, 6]$ ,  $B \in [3.3, 5.5]$ , and  $C \in [-3, 5]$   
D.  $A \in [3, 6]$ ,  $B \in [-6.1, -4.2]$ , and  $C \in [-3, 5]$   
E.  $A \in [0.8, 2.8]$ ,  $B \in [-1.4, -0.2]$ , and  $C \in [-3, 5]$
- 

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

$$-5(3x + 7) = -15(2x - 8)$$

- A.  $x \in [-2.11, 2.89]$   
B.  $x \in [10.33, 12.33]$   
C.  $x \in [-9.67, -4.67]$   
D.  $x \in [3.67, 6.67]$   
E. There are no real solutions.
- 

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  $5x + 8y = 12$  and passing through the point  $(2, 6)$ .

- A.  $m \in [-1.71, -1.51]$   $b \in [6.69, 7.41]$
  - B.  $m \in [0.29, 0.95]$   $b \in [4.3, 5.37]$
  - C.  $m \in [-0.99, -0.57]$   $b \in [-8.27, -6.86]$
  - D.  $m \in [-0.99, -0.57]$   $b \in [6.69, 7.41]$
  - E.  $m \in [-0.99, -0.57]$   $b \in [2.81, 4.44]$
- 

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

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

- A.  $x \in [1.74, 2.74]$
  - B.  $x \in [-14.35, -9.35]$
  - C.  $x \in [-66.12, -64.12]$
  - D.  $x \in [8.49, 11.49]$
  - 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  $b$ .

Perpendicular to  $8x - 5y = 6$  and passing through the point  $(9, 10)$ .

- A.  $m \in [-2.12, -1]$   $b \in [14.62, 17.62]$
  - B.  $m \in [-0.82, -0.62]$   $b \in [14.62, 17.62]$
  - C.  $m \in [-0.82, -0.62]$   $b \in [-17.62, -13.62]$
  - D.  $m \in [-0.82, -0.62]$   $b \in [-1, 2]$
  - E.  $m \in [0.6, 0.91]$   $b \in [2.38, 12.38]$
-