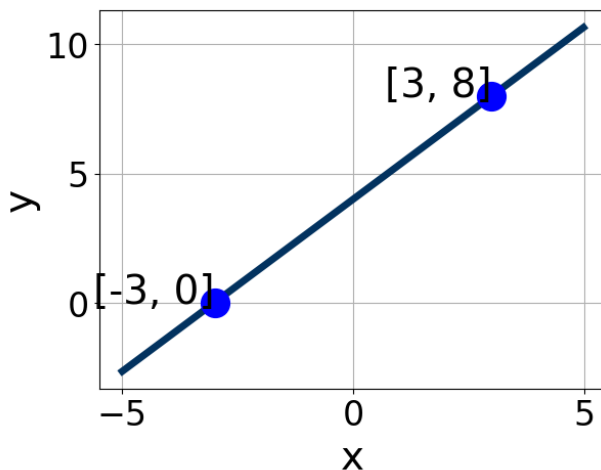


1. First, find the equation of the line containing the two points below. Then, write the equation as  $y = mx + b$  and choose the intervals that contain  $m$  and  $b$ .

$$(7, 2) \text{ and } (-10, -7)$$

- A.  $m \in [-0.14, 1.31]$   $b \in [0.34, 2.26]$   
B.  $m \in [-1.13, -0.17]$   $b \in [-13.05, -12.17]$   
C.  $m \in [-0.14, 1.31]$   $b \in [-2.43, -1.07]$   
D.  $m \in [-0.14, 1.31]$   $b \in [2.86, 3.56]$   
E.  $m \in [-0.14, 1.31]$   $b \in [-5.17, -4.93]$
- 

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.  $A \in [-3.33, 1.67]$ ,  $B \in [-1.66, -0.74]$ , and  $C \in [-7, -1]$   
B.  $A \in [2, 6]$ ,  $B \in [1.52, 4.96]$ , and  $C \in [11, 14]$   
C.  $A \in [-4, -2]$ ,  $B \in [1.52, 4.96]$ , and  $C \in [11, 14]$   
D.  $A \in [2, 6]$ ,  $B \in [-4.58, -1.64]$ , and  $C \in [-15, -10]$   
E.  $A \in [-3.33, 1.67]$ ,  $B \in [-0.08, 1.53]$ , and  $C \in [2, 9]$
-

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

$$-7(-2x - 3) = -19(-11x + 17)$$

- A.  $x \in [1.42, 1.74]$
  - B.  $x \in [1.23, 1.49]$
  - C.  $x \in [-1.72, -1.48]$
  - D.  $x \in [1.67, 1.78]$
  - E. There are no real solutions.
- 

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

$$-7(9x - 14) = -19(2x - 4)$$

- A.  $x \in [6.7, 8.3]$
  - B.  $x \in [-7.9, -6.2]$
  - C.  $x \in [-0.7, 1.4]$
  - D.  $x \in [1.5, 2]$
  - E. There are no real solutions.
- 

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  $b$ .

Parallel to  $3x + 4y = 6$  and passing through the point  $(7, 2)$ .

- A.  $m \in [-1.18, -0.1]$   $b \in [-5.6, -3.9]$
  - B.  $m \in [-1.18, -0.1]$   $b \in [-9, -7.2]$
  - C.  $m \in [0.38, 1.13]$   $b \in [-3.3, -0.4]$
  - D.  $m \in [-1.82, -0.97]$   $b \in [5.2, 8.2]$
  - E.  $m \in [-1.18, -0.1]$   $b \in [5.2, 8.2]$
-

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  $b$ .

$$(2, 3) \text{ and } (-7, -4)$$

- A.  $m \in [0.6, 2.4]$   $b \in [0.88, 1.18]$
  - B.  $m \in [0.6, 2.4]$   $b \in [-1.87, -1.28]$
  - C.  $m \in [0.6, 2.4]$   $b \in [2.89, 3.3]$
  - D.  $m \in [-2.6, -0.5]$   $b \in [-9.47, -9.35]$
  - E.  $m \in [0.6, 2.4]$   $b \in [1.32, 1.63]$
- 

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  $b$ .

Perpendicular to  $5x + 6y = 15$  and passing through the point  $(-2, -6)$ .

- A.  $m \in [0.86, 1.29]$   $b \in [3.31, 3.6]$
  - B.  $m \in [-1.6, -1.11]$   $b \in [-8.41, -8.28]$
  - C.  $m \in [0.86, 1.29]$   $b \in [-4.35, -3.66]$
  - D.  $m \in [0.86, 1.29]$   $b \in [-3.69, -3.22]$
  - E.  $m \in [0.67, 0.99]$   $b \in [-3.69, -3.22]$
- 

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

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

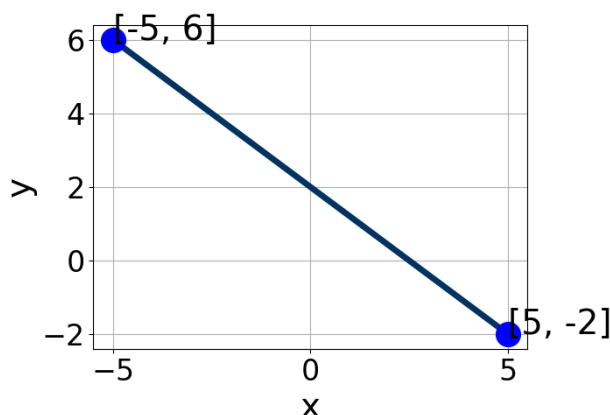
- A.  $x \in [4.2, 5.5]$
- B.  $x \in [-1.3, 1.4]$
- C.  $x \in [-1.8, -1.3]$
- D.  $x \in [7.2, 9.1]$
- E. There are no real solutions.

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

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

- A.  $x \in [-3.8, -3.3]$
- B.  $x \in [-7.4, -5.9]$
- C.  $x \in [-11.3, -7.4]$
- D.  $x \in [-0.2, 0.8]$
- E. There are no real solutions.

10. 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.  $A \in [2, 7]$ ,  $B \in [-7.8, -4.9]$ , and  $C \in [-11, -4]$
- B.  $A \in [-1.2, 3.8]$ ,  $B \in [-0.4, 2.9]$ , and  $C \in [2, 8]$
- C.  $A \in [-1.2, 3.8]$ ,  $B \in [-3.9, -0.4]$ , and  $C \in [-2, -1]$
- D.  $A \in [2, 7]$ ,  $B \in [3, 5.7]$ , and  $C \in [7, 11]$
- E.  $A \in [-14, -2]$ ,  $B \in [-7.8, -4.9]$ , and  $C \in [-11, -4]$