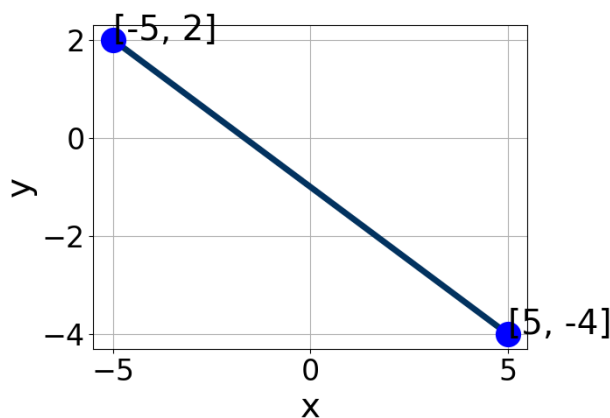


1. Write the equation of the line in the graph below in Standard form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [-0.5, 1.8]$ ,  $B \in [-0.65, 2.42]$ , and  $C \in [-1.8, -0.4]$   
B.  $A \in [1, 4.9]$ ,  $B \in [4.55, 5.7]$ , and  $C \in [-6.5, -3.6]$   
C.  $A \in [1, 4.9]$ ,  $B \in [-5.19, -3.45]$ , and  $C \in [4.7, 7.2]$   
D.  $A \in [-0.5, 1.8]$ ,  $B \in [-1.07, -0.63]$ , and  $C \in [0.4, 4.2]$   
E.  $A \in [-3.2, -0.2]$ ,  $B \in [-5.19, -3.45]$ , and  $C \in [4.7, 7.2]$
- 

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

$$-5(-18x - 4) = -14(-9x - 16)$$

- A.  $x \in [-5.13, 2.87]$   
B.  $x \in [4.78, 10.78]$   
C.  $x \in [-5.67, -4.67]$   
D.  $x \in [-6.78, -5.78]$   
E. There are no real solutions.
- 

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

$$-12(9x + 16) = -3(-6x + 13)$$

- A.  $x \in [-2.94, -2.3]$
  - B.  $x \in [-2.55, -1.5]$
  - C.  $x \in [-1.65, -1.07]$
  - D.  $x \in [0.42, 2.59]$
  - 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  $7x - 4y = 12$  and passing through the point  $(-5, -3)$ .

- A.  $m \in [-1.6, -0.2]$   $b \in [-6.86, -3.86]$
  - B.  $m \in [-1.6, -0.2]$   $b \in [3.86, 9.86]$
  - C.  $m \in [-1.6, -0.2]$   $b \in [2, 4]$
  - D.  $m \in [-0.1, 3.3]$   $b \in [-1.14, 0.86]$
  - E.  $m \in [-4.7, -1.7]$   $b \in [-6.86, -3.86]$
- 

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  $4x + 7y = 5$  and passing through the point  $(9, 6)$ .

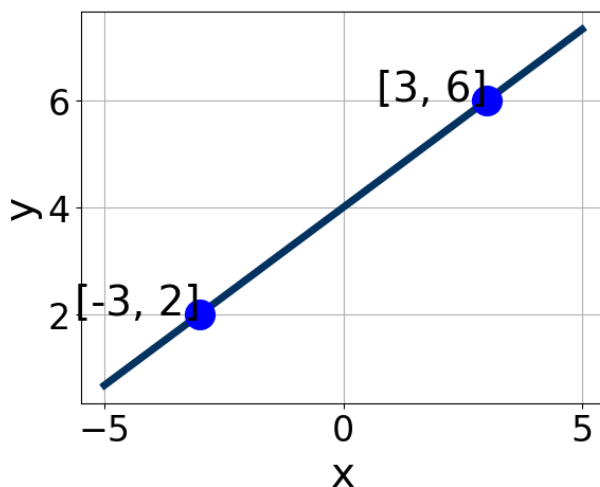
- A.  $m \in [0.68, 2.58]$   $b \in [-5, -2]$
  - B.  $m \in [0.68, 2.58]$   $b \in [-11.75, -4.75]$
  - C.  $m \in [0.68, 2.58]$   $b \in [9.75, 11.75]$
  - D.  $m \in [-2.18, -0.97]$   $b \in [21.75, 27.75]$
  - E.  $m \in [0.35, 1]$   $b \in [-11.75, -4.75]$
-

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  $b$ .

$(6, 5)$  and  $(5, -5)$

- A.  $m \in [8, 11]$   $b \in [55, 56]$   
B.  $m \in [-10, -9]$   $b \in [42, 49]$   
C.  $m \in [8, 11]$   $b \in [-1, 7]$   
D.  $m \in [8, 11]$   $b \in [-57, -51]$   
E.  $m \in [8, 11]$   $b \in [-11, -8]$
- 

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.  $A \in [-1.3, 0.3]$ ,  $B \in [-1.3, -0.76]$ , and  $C \in [-6, -3]$   
B.  $A \in [0.8, 2.9]$ ,  $B \in [-3.59, -2.38]$ , and  $C \in [-14, -10]$   
C.  $A \in [-2.1, -1.9]$ ,  $B \in [2.99, 3.06]$ , and  $C \in [12, 15]$   
D.  $A \in [-1.3, 0.3]$ ,  $B \in [0.32, 2.37]$ , and  $C \in [1, 6]$   
E.  $A \in [0.8, 2.9]$ ,  $B \in [2.99, 3.06]$ , and  $C \in [12, 15]$
-

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

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

- A.  $x \in [-3.87, -1.87]$
  - B.  $x \in [50.4, 54.4]$
  - C.  $x \in [0.66, 3.66]$
  - D.  $x \in [9.13, 16.13]$
  - E. There are no real solutions.
- 

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

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

- A.  $x \in [-37.6, -32.6]$
  - B.  $x \in [-2.11, 0.89]$
  - C.  $x \in [-15.4, -6.4]$
  - D.  $x \in [3, 4]$
  - 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  $b$ .

$$(8, -4) \text{ and } (-2, 6)$$

- A.  $m \in [-1.5, -0.5]$   $b \in [-4, -1]$
- B.  $m \in [-0.1, 3.3]$   $b \in [7, 13]$
- C.  $m \in [-1.5, -0.5]$   $b \in [3, 6]$
- D.  $m \in [-1.5, -0.5]$   $b \in [-13, -5]$
- E.  $m \in [-1.5, -0.5]$   $b \in [7, 13]$

