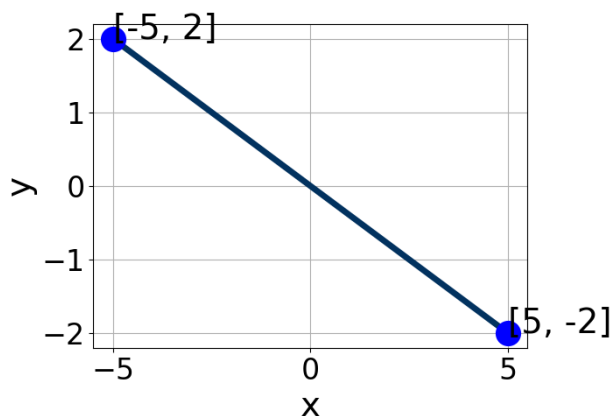


1. Write the equation of the line in the graph below in Standard form  $Ax + By = C$ . Then, choose the intervals that contain  $A$ ,  $B$ , and  $C$ .



- A.  $A \in [0.13, 1.63]$ ,  $B \in [-3.6, 0.2]$ , and  $C \in [-2, 5]$   
 B.  $A \in [1.51, 3.33]$ ,  $B \in [3.2, 6.2]$ , and  $C \in [-2, 5]$   
 C.  $A \in [0.13, 1.63]$ ,  $B \in [-0.9, 4.6]$ , and  $C \in [-2, 5]$   
 D.  $A \in [-3.4, -0.18]$ ,  $B \in [-5.2, -4.6]$ , and  $C \in [-2, 5]$   
 E.  $A \in [1.51, 3.33]$ ,  $B \in [-5.2, -4.6]$ , and  $C \in [-2, 5]$

2. 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  $5x + 6y = 10$  and passing through the point  $(6, -4)$ .

- A.  $m \in [-0.95, -0.15]$   $b \in [-11.6, -9.6]$   
 B.  $m \in [-1.94, -1.04]$   $b \in [-0.9, 2]$   
 C.  $m \in [-0.95, -0.15]$   $b \in [-0.9, 2]$   
 D.  $m \in [-0.95, -0.15]$   $b \in [-1.7, 0.2]$   
 E.  $m \in [0.54, 1.39]$   $b \in [-9.4, -7.9]$

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

$$-4(-5x - 3) = -18(6x + 12)$$

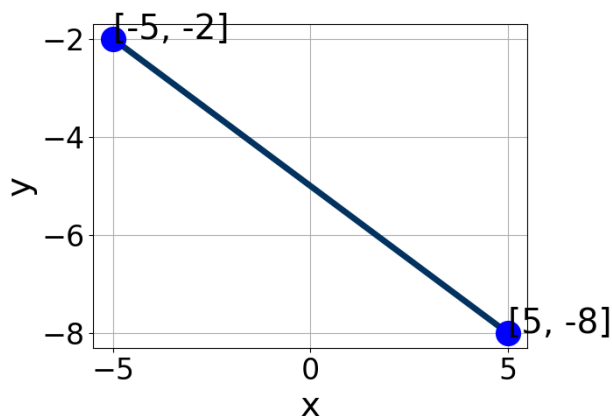
- A.  $x \in [1.49, 1.94]$
- B.  $x \in [-1.78, -1.56]$
- C.  $x \in [-2.06, -1.69]$
- D.  $x \in [-2.38, -2.2]$
- E. There are no real solutions.

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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  $4x + 5y = 14$  and passing through the point  $(-5, -5)$ .

- A.  $m \in [-2.1, 0.04]$   $b \in [-11.88, -10.82]$
- B.  $m \in [0.68, 1.08]$   $b \in [1.1, 1.34]$
- C.  $m \in [1.15, 1.88]$   $b \in [-1.71, -1.06]$
- D.  $m \in [1.15, 1.88]$   $b \in [1.1, 1.34]$
- E.  $m \in [1.15, 1.88]$   $b \in [-0.29, 0.74]$

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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.  $A \in [1, 11]$ ,  $B \in [-7.5, -3.5]$ , and  $C \in [22, 28]$
- B.  $A \in [-0.4, 2.6]$ ,  $B \in [-4.7, 0.4]$ , and  $C \in [0, 7]$

- C.  $A \in [1, 11]$ ,  $B \in [2.2, 7]$ , and  $C \in [-26, -21]$   
D.  $A \in [-0.4, 2.6]$ ,  $B \in [0, 1.4]$ , and  $C \in [-7, 4]$   
E.  $A \in [-5, 0]$ ,  $B \in [-7.5, -3.5]$ , and  $C \in [22, 28]$
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6. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{-3x - 5}{7} - \frac{-3x - 9}{2} = \frac{8x - 7}{4}$$

- A.  $x \in [10.85, 13.85]$   
B.  $x \in [0.69, 2.69]$   
C.  $x \in [-4.73, -2.73]$   
D.  $x \in [4.96, 7.96]$   
E. There are no real solutions.
- 

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

$$-6(-17x + 19) = -11(7x + 16)$$

- A.  $x \in [-3, -1.4]$   
B.  $x \in [11.4, 13.8]$   
C.  $x \in [-1.2, 0.6]$   
D.  $x \in [-0.2, 2.3]$   
E. There are no real solutions.
- 

8. 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  $b$ .

$$(2, 3) \text{ and } (10, 5)$$

- A.  $m \in [-0.04, 0.77]$   $b \in [-3.17, -1.43]$

- B.  $m \in [-0.04, 0.77]$   $b \in [-6.63, -4.17]$   
C.  $m \in [-0.04, 0.77]$   $b \in [2.27, 2.65]$   
D.  $m \in [-0.61, -0.12]$   $b \in [5.96, 7.78]$   
E.  $m \in [-0.04, 0.77]$   $b \in [-0.25, 2.15]$
- 

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

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

- A.  $x \in [-2.46, -1.69]$   
B.  $x \in [-9.71, -9.02]$   
C.  $x \in [-0.13, 0.7]$   
D.  $x \in [-1.22, -0.78]$   
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  $b$ .

$$(5, -5) \text{ and } (-10, 8)$$

- A.  $m \in [0.6, 4.6]$   $b \in [16.3, 17.2]$   
B.  $m \in [-1.3, -0.8]$   $b \in [-2.2, 0.1]$   
C.  $m \in [-1.3, -0.8]$   $b \in [-11.2, -8.6]$   
D.  $m \in [-1.3, -0.8]$   $b \in [17.6, 19]$   
E.  $m \in [-1.3, -0.8]$   $b \in [0.3, 2.2]$
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