

1. 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 $5x - 3y = 7$ and passing through the point $(10, 3)$.

- A. $m \in [0.4, 0.8]$ $b \in [-13.67, -9.67]$
 - B. $m \in [-3.3, -1]$ $b \in [18.67, 22.67]$
 - C. $m \in [1.3, 2.6]$ $b \in [-7, -5]$
 - D. $m \in [1.3, 2.6]$ $b \in [9.67, 14.67]$
 - E. $m \in [1.3, 2.6]$ $b \in [-13.67, -9.67]$
-

2. 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 .

$(-6, 2)$ and $(-5, -9)$

- A. $m \in [-12, -8]$ $b \in [61, 66]$
 - B. $m \in [-12, -8]$ $b \in [6, 14]$
 - C. $m \in [-12, -8]$ $b \in [-65, -58]$
 - D. $m \in [-12, -8]$ $b \in [-6, 0]$
 - E. $m \in [10, 15]$ $b \in [46, 52]$
-

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

$$-5(-4x + 7) = -16(11x - 6)$$

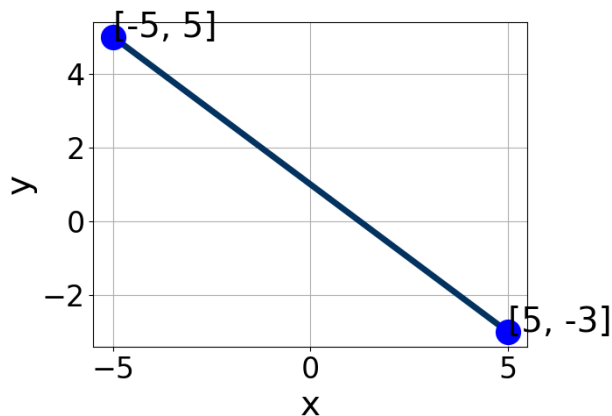
- A. $x \in [-0.32, -0.24]$
- B. $x \in [0.24, 0.35]$
- C. $x \in [0.62, 0.73]$
- D. $x \in [0.36, 0.5]$
- E. There are no real solutions.

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

$$\frac{6x - 9}{2} - \frac{9x + 9}{4} = \frac{4x - 8}{5}$$

- A. $x \in [-15, -11]$
- B. $x \in [-204, -198]$
- C. $x \in [-104, -99]$
- D. $x \in [-1.74, 3.26]$
- E. There are no real solutions.

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. $A \in [-3.9, 3.7]$, $B \in [-0.5, 2.7]$, and $C \in [-0.6, 4.2]$
- B. $A \in [3.1, 4.7]$, $B \in [-8.2, -3.4]$, and $C \in [-6.2, -2.1]$
- C. $A \in [-3.9, 3.7]$, $B \in [-2.2, -0.5]$, and $C \in [-1.7, -0.4]$
- D. $A \in [3.1, 4.7]$, $B \in [1.3, 6.8]$, and $C \in [2.2, 9]$
- E. $A \in [-4.4, -3.5]$, $B \in [-8.2, -3.4]$, and $C \in [-6.2, -2.1]$

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

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

- A. $x \in [-1.9, -0.5]$
 - B. $x \in [0.1, 2.3]$
 - C. $x \in [-10, -7.8]$
 - D. $x \in [-7.2, -2.6]$
 - E. There are no real solutions.
-

7. 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 .

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

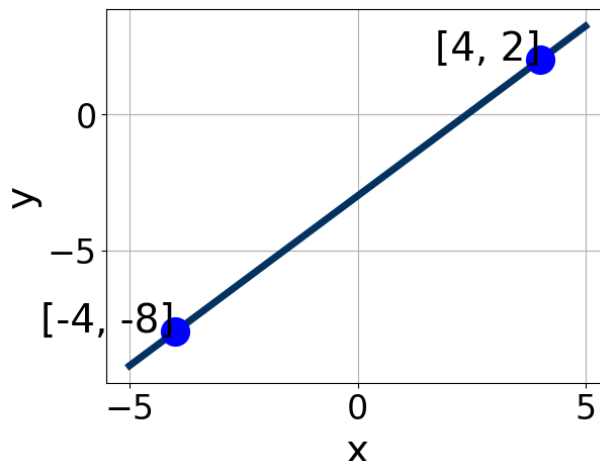
- A. $m \in [-0.85, 0.34]$ $b \in [-5.44, -3.99]$
 - B. $m \in [0.28, 1.64]$ $b \in [0.15, 1.14]$
 - C. $m \in [-0.85, 0.34]$ $b \in [8.51, 10.71]$
 - D. $m \in [-0.85, 0.34]$ $b \in [-10.39, -8.81]$
 - E. $m \in [-0.85, 0.34]$ $b \in [1.7, 2.37]$
-

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

$$-2(10x + 17) = -12(-7x + 16)$$

- A. $x \in [1.36, 2.01]$
- B. $x \in [3.4, 3.99]$
- C. $x \in [-2.73, -1.34]$
- D. $x \in [1.84, 3.15]$
- E. There are no real solutions.

9. 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. $A \in [-1.3, -0.9]$, $B \in [0.77, 1.5]$, and $C \in [-6, 1]$
B. $A \in [4, 5.1]$, $B \in [-4.18, -3.5]$, and $C \in [12, 18]$
C. $A \in [4, 5.1]$, $B \in [3.18, 5.37]$, and $C \in [-12, -11]$
D. $A \in [-1.3, -0.9]$, $B \in [-1.24, -0.3]$, and $C \in [-2, 8]$
E. $A \in [-5.7, -3.8]$, $B \in [3.18, 5.37]$, and $C \in [-12, -11]$

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 .

Parallel to $4x - 5y = 4$ and passing through the point $(-8, -6)$.

- A. $m \in [-0.91, -0.3]$ $b \in [-12.59, -11.76]$
B. $m \in [1.02, 1.66]$ $b \in [-0.14, 1.11]$
C. $m \in [0.02, 1.17]$ $b \in [-0.7, -0.25]$
D. $m \in [0.02, 1.17]$ $b \in [1.2, 2.63]$
E. $m \in [0.02, 1.17]$ $b \in [-0.14, 1.11]$