

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

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

- A. $x \in [0.8, 2.9]$
 - B. $x \in [-2.6, -2]$
 - C. $x \in [-3.6, -2.8]$
 - D. $x \in [-6.1, -5.5]$
 - E. There are no real solutions.
-

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 $4x - 9y = 10$ and passing through the point $(9, -9)$.

- A. $m \in [-0.22, 0.84]$ $b \in [-15, -11]$
 - B. $m \in [-0.49, -0.38]$ $b \in [-7, -3]$
 - C. $m \in [-0.22, 0.84]$ $b \in [10, 20]$
 - D. $m \in [-0.22, 0.84]$ $b \in [-22, -17]$
 - E. $m \in [1.83, 2.83]$ $b \in [-15, -11]$
-

3. 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 $7x - 6y = 8$ and passing through the point $(5, 5)$.

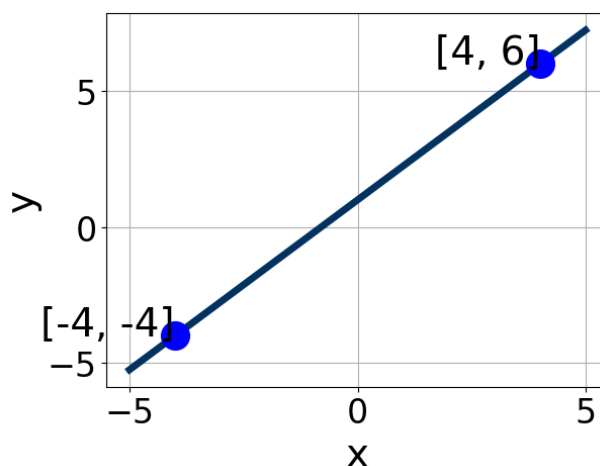
- A. $m \in [1.07, 2.11]$ $b \in [-1.02, -0.81]$
- B. $m \in [1.07, 2.11]$ $b \in [-0.01, 0.67]$
- C. $m \in [-1.66, -0.24]$ $b \in [10.67, 11.11]$
- D. $m \in [1.07, 2.11]$ $b \in [0.42, 1.28]$
- E. $m \in [0.22, 1.15]$ $b \in [-1.02, -0.81]$

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

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

- A. $x \in [-0.25, 0.75]$
- B. $x \in [-7.4, -4.4]$
- C. $x \in [0.44, 3.44]$
- D. $x \in [-1.44, -0.44]$
- 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. $A \in [4.5, 7.5]$, $B \in [2.3, 6.8]$, and $C \in [3.86, 4.37]$
- B. $A \in [-1.4, -0.2]$, $B \in [-2.7, -0.9]$, and $C \in [-1.9, -0.32]$
- C. $A \in [4.5, 7.5]$, $B \in [-7.3, -2.8]$, and $C \in [-4.04, -3.4]$
- D. $A \in [-1.4, -0.2]$, $B \in [0.2, 1.7]$, and $C \in [-0.78, 1.88]$
- E. $A \in [-5.8, -3]$, $B \in [2.3, 6.8]$, and $C \in [3.86, 4.37]$

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

$$-6(8x - 3) = -5(-18x - 14)$$

- A. $x \in [-1.08, -0.55]$
- B. $x \in [-0.45, 0.28]$
- C. $x \in [0.48, 1.05]$
- D. $x \in [-2.3, -1.86]$
- E. There are no real solutions.

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

$$-6(-15x + 12) = -17(-2x + 8)$$

- A. $x \in [-1.3, 0.2]$
- B. $x \in [0.2, 3.1]$
- C. $x \in [2.2, 4.2]$
- D. $x \in [-5.1, -2.3]$
- 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 .

$$(6, -6) \text{ and } (5, -4)$$

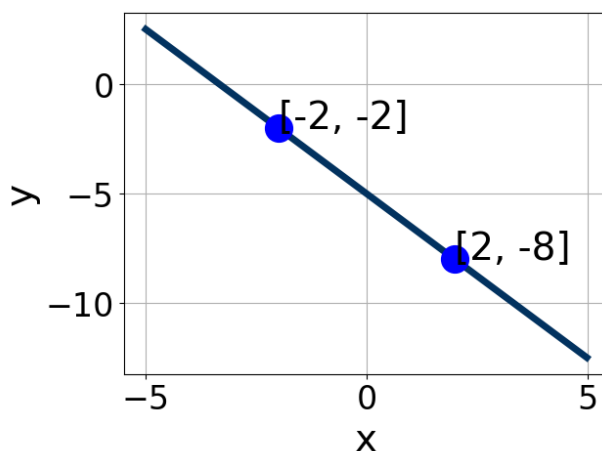
- A. $m \in [-4.1, 1.9]$ $b \in [-12.96, -10.99]$
- B. $m \in [-4.1, 1.9]$ $b \in [5.73, 6.92]$
- C. $m \in [-4.1, 1.9]$ $b \in [-9.65, -7.79]$
- D. $m \in [-4.1, 1.9]$ $b \in [-6.63, -5.62]$
- E. $m \in [-0.4, 4.6]$ $b \in [-15.4, -13.76]$

9. 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 .

$(2, 4)$ and $(3, 3)$

- A. $m \in [0.89, 1.2]$ $b \in [0, 1]$
- B. $m \in [-2.15, -0.98]$ $b \in [0, 1]$
- C. $m \in [-2.15, -0.98]$ $b \in [5, 9]$
- D. $m \in [-2.15, -0.98]$ $b \in [-7, -3]$
- E. $m \in [-2.15, -0.98]$ $b \in [1, 3]$

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. $A \in [2.67, 3.12]$, $B \in [1.33, 2.03]$, and $C \in [-10, -8]$
- B. $A \in [2.67, 3.12]$, $B \in [-2.74, -1.88]$, and $C \in [9, 13]$
- C. $A \in [1.2, 1.56]$, $B \in [-1.35, -0.53]$, and $C \in [4, 6]$
- D. $A \in [1.2, 1.56]$, $B \in [0.95, 1.59]$, and $C \in [-7, -4]$
- E. $A \in [-4.49, -2.95]$, $B \in [-2.74, -1.88]$, and $C \in [9, 13]$