

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

$$-18(-7x + 19) = -8(-10x - 13)$$

- A. $x \in [-1.84, 2.16]$
 - B. $x \in [7.7, 13.7]$
 - C. $x \in [3.17, 6.17]$
 - D. $x \in [-8.17, -1.17]$
 - E. There are no real solutions.
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2. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{4x + 7}{3} - \frac{-5x + 3}{7} = \frac{3x - 6}{2}$$

- A. $x \in [-3, 0.1]$
 - B. $x \in [-19.9, -17.2]$
 - C. $x \in [-11, -9.4]$
 - D. $x \in [-10.5, -8.7]$
 - E. There are no real solutions.
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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 $5x + 4y = 3$ and passing through the point $(8, 6)$.

- A. $m \in [-1.74, -0.87]$ $b \in [-16.1, -14.6]$
 - B. $m \in [-1.74, -0.87]$ $b \in [13.5, 16.4]$
 - C. $m \in [-1.02, -0.79]$ $b \in [13.5, 16.4]$
 - D. $m \in [-1.74, -0.87]$ $b \in [-2.1, -1.7]$
 - E. $m \in [0.81, 1.59]$ $b \in [-4.3, -2.9]$
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4. 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 .

$$(-11, 6) \text{ and } (-7, 3)$$

A. $m \in [-3.8, -0.7]$ $b \in [-3.6, -2]$

B. $m \in [-3.8, -0.7]$ $b \in [0.1, 3.7]$

C. $m \in [-3.8, -0.7]$ $b \in [15.6, 17.9]$

D. $m \in [-3.8, -0.7]$ $b \in [8.4, 11.7]$

E. $m \in [0.1, 1.4]$ $b \in [7.9, 9.2]$

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5. 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 .

$$(2, 6) \text{ and } (10, 2)$$

A. $m \in [-1.43, 0.27]$ $b \in [2.61, 4.6]$

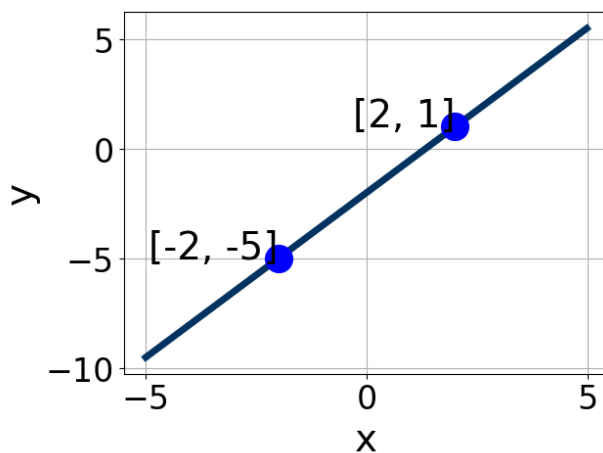
B. $m \in [-1.43, 0.27]$ $b \in [5.88, 8.39]$

C. $m \in [-1.43, 0.27]$ $b \in [-7.53, -6.79]$

D. $m \in [-1.43, 0.27]$ $b \in [-8.5, -7.99]$

E. $m \in [-0.34, 1.24]$ $b \in [-3.44, -2.64]$

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6. 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 .



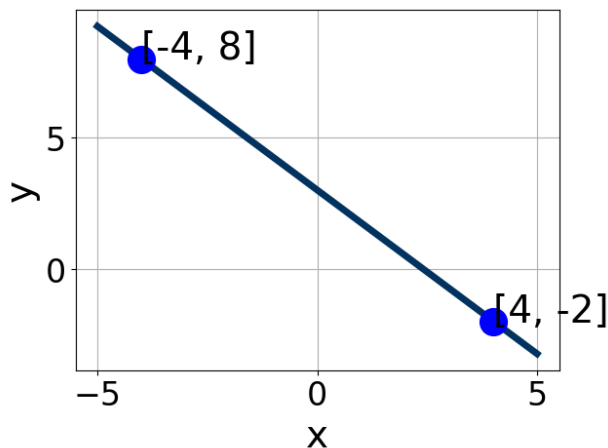
- A. $A \in [1.4, 4.7]$, $B \in [-2.24, -1.31]$, and $C \in [2.8, 4.3]$
- B. $A \in [-2.5, 1.3]$, $B \in [-1.97, -0.96]$, and $C \in [-0.7, 2.6]$
- C. $A \in [-2.5, 1.3]$, $B \in [0.68, 1.32]$, and $C \in [-3.2, 0.1]$
- D. $A \in [1.4, 4.7]$, $B \in [1.75, 2.41]$, and $C \in [-5, -3.6]$
- E. $A \in [-5.3, -2.8]$, $B \in [1.75, 2.41]$, and $C \in [-5, -3.6]$

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

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

- A. $x \in [-8.55, -5.55]$
- B. $x \in [-6.18, -3.18]$
- C. $x \in [-42.18, -35.18]$
- D. $x \in [-2.52, 0.48]$
- E. There are no real solutions.

8. 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. $A \in [-4.75, 2.25]$, $B \in [0.95, 1.15]$, and $C \in [3, 6]$
 B. $A \in [3, 8]$, $B \in [3.92, 5.71]$, and $C \in [7, 18]$
 C. $A \in [-9, -4]$, $B \in [-4.73, -3.12]$, and $C \in [-15, -6]$
 D. $A \in [3, 8]$, $B \in [-4.73, -3.12]$, and $C \in [-15, -6]$
 E. $A \in [-4.75, 2.25]$, $B \in [-1.46, -0.73]$, and $C \in [-6, 0]$

9. 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 $9x - 8y = 8$ and passing through the point $(9, 8)$.

- A. $m \in [-0.89, -0.73]$ $b \in [12.5, 16.5]$
 B. $m \in [-0.89, -0.73]$ $b \in [-16.5, -14.2]$
 C. $m \in [-1.33, -1.12]$ $b \in [12.5, 16.5]$
 D. $m \in [0.82, 1.01]$ $b \in [-0.3, 0.1]$
 E. $m \in [-0.89, -0.73]$ $b \in [-1.3, -0.5]$

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

$$-19(-3x + 16) = -8(-9x + 17)$$

- A. $x \in [-12.2, -8.2]$

- B. $x \in [-30.33, -28.33]$
 - C. $x \in [1.41, 4.41]$
 - D. $x \in [27.33, 32.33]$
 - E. There are no real solutions.
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