

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

$$-15(2x + 7) = -13(-8x + 5)$$

- A. $x \in [-0.47, 0.66]$
 - B. $x \in [0.57, 1.53]$
 - C. $x \in [1.89, 2.45]$
 - D. $x \in [-2.45, -1.08]$
 - E. There are no real solutions.
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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 .

$$(-6, 6) \text{ and } (10, -4)$$

- A. $m \in [-1.62, 0.38]$ $b \in [-9.25, -0.25]$
 - B. $m \in [-0.38, 7.62]$ $b \in [-12.25, -4.25]$
 - C. $m \in [-1.62, 0.38]$ $b \in [-15, -11]$
 - D. $m \in [-1.62, 0.38]$ $b \in [2.25, 6.25]$
 - E. $m \in [-1.62, 0.38]$ $b \in [12, 14]$
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3. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A. $x \in [-15.81, -13.81]$
- B. $x \in [-34.11, -30.11]$
- C. $x \in [-2.58, -0.58]$
- D. $x \in [-9.03, -4.03]$
- 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 .

Parallel to $4x + 3y = 5$ and passing through the point $(-8, 6)$.

- A. $m \in [-1.47, -0.93]$ $b \in [-4.67, -3.67]$
 - B. $m \in [1.01, 1.49]$ $b \in [15.67, 20.67]$
 - C. $m \in [-0.83, -0.38]$ $b \in [-4.67, -3.67]$
 - D. $m \in [-1.47, -0.93]$ $b \in [11, 16]$
 - E. $m \in [-1.47, -0.93]$ $b \in [2.67, 6.67]$
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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 .

Parallel to $8x - 7y = 5$ and passing through the point $(-9, 7)$.

- A. $m \in [1.12, 2]$ $b \in [-17.68, -16.87]$
 - B. $m \in [1.12, 2]$ $b \in [15.53, 16.09]$
 - C. $m \in [-0.63, 0.98]$ $b \in [16.4, 17.85]$
 - D. $m \in [-2.14, -0.42]$ $b \in [-3.68, -3.22]$
 - E. $m \in [1.12, 2]$ $b \in [16.4, 17.85]$
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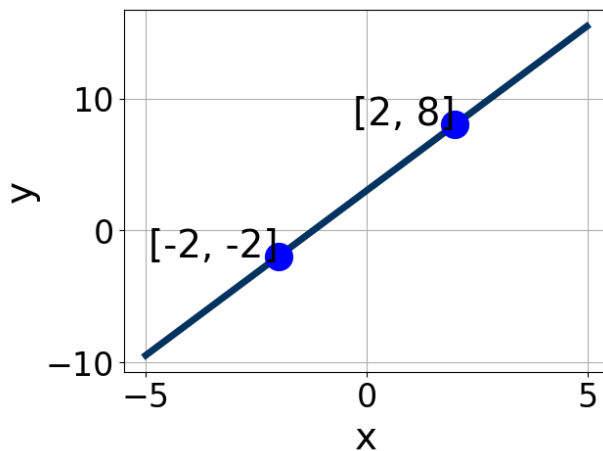
6. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A. $x \in [1.1, 5.1]$
- B. $x \in [-15.89, -11.89]$
- C. $x \in [-61.89, -54.89]$
- D. $x \in [-245.67, -240.67]$

E. There are no real solutions.

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. $A \in [-7.7, -4.4]$, $B \in [1.43, 3.05]$, and $C \in [3.5, 7.6]$
 B. $A \in [-2.7, -0.9]$, $B \in [-1.2, -0.41]$, and $C \in [-5.5, -1.6]$
 C. $A \in [4.4, 5.7]$, $B \in [1.43, 3.05]$, and $C \in [3.5, 7.6]$
 D. $A \in [-2.7, -0.9]$, $B \in [0.86, 1.44]$, and $C \in [1.3, 3.7]$
 E. $A \in [4.4, 5.7]$, $B \in [-2.78, -1.11]$, and $C \in [-10.5, -5.7]$

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 .

$(10, 6)$ and $(7, -11)$

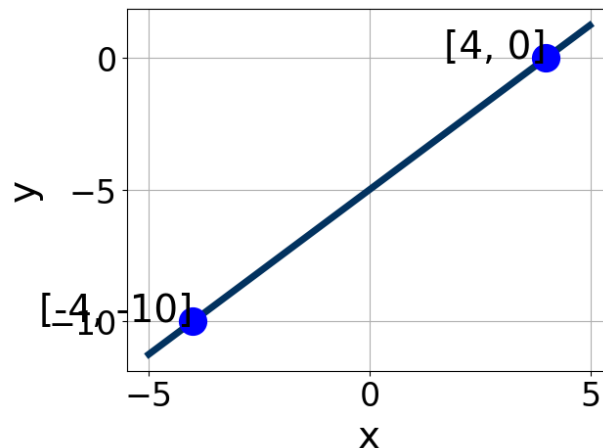
- A. $m \in [1.67, 6.67]$ $b \in [46.67, 51.67]$
 B. $m \in [1.67, 6.67]$ $b \in [-6, 3]$
 C. $m \in [1.67, 6.67]$ $b \in [-50.67, -48.67]$
 D. $m \in [1.67, 6.67]$ $b \in [-18, -15]$
 E. $m \in [-15.67, -1.67]$ $b \in [23.67, 33.67]$

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

$$-10(5x - 17) = -13(-2x - 18)$$

- A. $x \in [-1.84, 0.16]$
- B. $x \in [15.83, 17.83]$
- C. $x \in [3.32, 6.32]$
- D. $x \in [-5.32, -3.32]$
- E. There are no real solutions.

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. $A \in [-4.25, 1.75]$, $B \in [-0.9, 1.1]$, and $C \in [-7, -4]$
- B. $A \in [2, 6]$, $B \in [-5.4, -1.2]$, and $C \in [19, 22]$
- C. $A \in [-6, -3]$, $B \in [3, 6.4]$, and $C \in [-23, -16]$
- D. $A \in [2, 6]$, $B \in [3, 6.4]$, and $C \in [-23, -16]$
- E. $A \in [-4.25, 1.75]$, $B \in [-1.7, -0.2]$, and $C \in [0, 6]$