

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

$$-13(-17x + 10) = -6(9x - 3)$$

- A. $x \in [0.34, 0.49]$
 - B. $x \in [0.55, 0.79]$
 - C. $x \in [-0.51, -0.39]$
 - D. $x \in [0.47, 0.67]$
 - E. There are no real solutions.
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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 $8x - 7y = 11$ and passing through the point $(-6, -3)$.

- A. $m \in [0.96, 1.16]$ $b \in [2.1, 3.7]$
 - B. $m \in [0.96, 1.16]$ $b \in [3.8, 5]$
 - C. $m \in [-1.44, -0.93]$ $b \in [-11.7, -7.1]$
 - D. $m \in [0.7, 1.12]$ $b \in [3.8, 5]$
 - E. $m \in [0.96, 1.16]$ $b \in [-4.1, -1.9]$
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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 .

Perpendicular to $7x - 9y = 5$ and passing through the point $(-10, 9)$.

- A. $m \in [-0.92, -0.67]$ $b \in [-5.7, -2.3]$
- B. $m \in [-2.25, -0.87]$ $b \in [-5.7, -2.3]$
- C. $m \in [-2.25, -0.87]$ $b \in [17.7, 19.4]$
- D. $m \in [1.18, 2.38]$ $b \in [20, 23.9]$
- E. $m \in [-2.25, -0.87]$ $b \in [2.4, 4.4]$

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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 .

$$(-10, -2) \text{ and } (-11, -9)$$

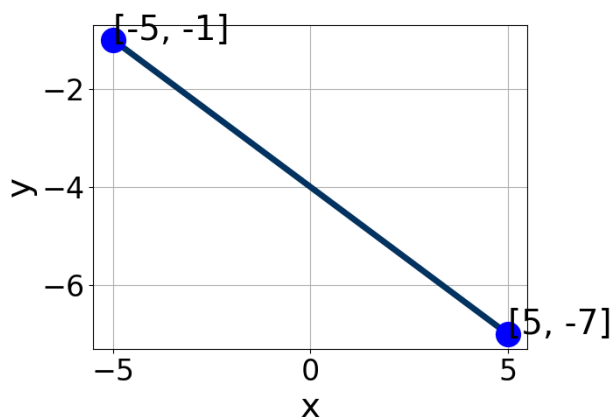
- A. $m \in [6, 11]$ $b \in [-71, -67]$
- B. $m \in [6, 11]$ $b \in [68, 72]$
- C. $m \in [-13, -5]$ $b \in [-91, -85]$
- D. $m \in [6, 11]$ $b \in [8, 12]$
- E. $m \in [6, 11]$ $b \in [-2, 4]$
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5. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x + 9}{7} - \frac{-5x - 6}{8} = \frac{3x - 3}{4}$$

- A. $x \in [-5.24, -3.24]$
- B. $x \in [-61.29, -57.29]$
- C. $x \in [-0.56, 2.44]$
- D. $x \in [-11.18, -7.18]$
- E. There are no real solutions.
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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. $A \in [2.1, 4.2]$, $B \in [4.1, 5.8]$, and $C \in [-21, -14]$
- B. $A \in [-3.8, -2.6]$, $B \in [-6.3, -3]$, and $C \in [17, 25]$
- C. $A \in [0.2, 1.2]$, $B \in [0.7, 3.9]$, and $C \in [-7, -3]$
- D. $A \in [0.2, 1.2]$, $B \in [-3.6, -0.1]$, and $C \in [3, 6]$
- E. $A \in [2.1, 4.2]$, $B \in [-6.3, -3]$, and $C \in [17, 25]$

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

$$-17(8x + 6) = -15(-19x + 3)$$

- A. $x \in [-0.43, -0.26]$
- B. $x \in [0.19, 0.62]$
- C. $x \in [-0.18, -0.07]$
- D. $x \in [0.93, 1.06]$
- E. There are no real solutions.

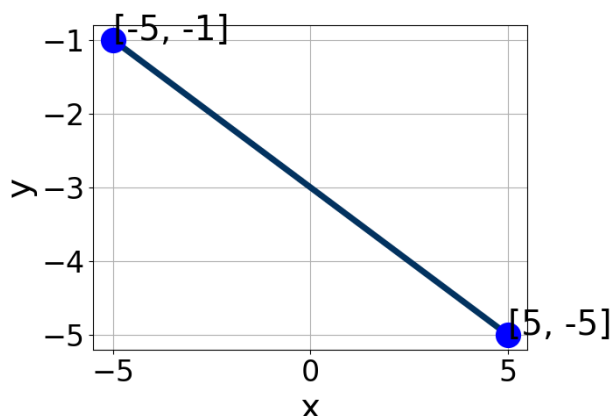
8. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x - 6}{6} - \frac{8x - 5}{7} = \frac{-7x - 9}{8}$$

- A. $x \in [0.98, 1.26]$
- B. $x \in [-15.3, -14.1]$

- C. $x \in [-1.6, -1.42]$
- D. $x \in [-0.3, 0.43]$
- E. There are no real solutions.

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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. $A \in [-0.84, 1.22]$, $B \in [-0.11, 1.52]$, and $C \in [-6, 1]$
- B. $A \in [1.72, 2.32]$, $B \in [4.04, 5.22]$, and $C \in [-17, -9]$
- C. $A \in [-3.8, -1.66]$, $B \in [-5.66, -4.56]$, and $C \in [12, 20]$
- D. $A \in [1.72, 2.32]$, $B \in [-5.66, -4.56]$, and $C \in [12, 20]$
- E. $A \in [-0.84, 1.22]$, $B \in [-1.39, -0.41]$, and $C \in [3, 5]$

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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 .

$(-10, 5)$ and $(-6, -9)$

- A. $m \in [-3.5, 0.5]$ $b \in [13.2, 16.6]$
- B. $m \in [-3.5, 0.5]$ $b \in [29.3, 31.4]$
- C. $m \in [-3.5, 0.5]$ $b \in [-33.1, -27]$
- D. $m \in [0.5, 8.5]$ $b \in [11, 13.7]$

$$\text{E. } m \in [-3.5, 0.5] \quad b \in [-3.6, -2]$$
