

1. 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 .

$$(5, 6) \text{ and } (9, -3)$$

- A. $m \in [0.25, 5.25]$ $b \in [-23.25, -22.25]$
B. $m \in [-7.25, 1.75]$ $b \in [-20.25, -13.25]$
C. $m \in [-7.25, 1.75]$ $b \in [12.25, 19.25]$
D. $m \in [-7.25, 1.75]$ $b \in [-14, -5]$
E. $m \in [-7.25, 1.75]$ $b \in [-5, 3]$
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2. Solve the linear equation below. Then, choose the interval that contains the solution.

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

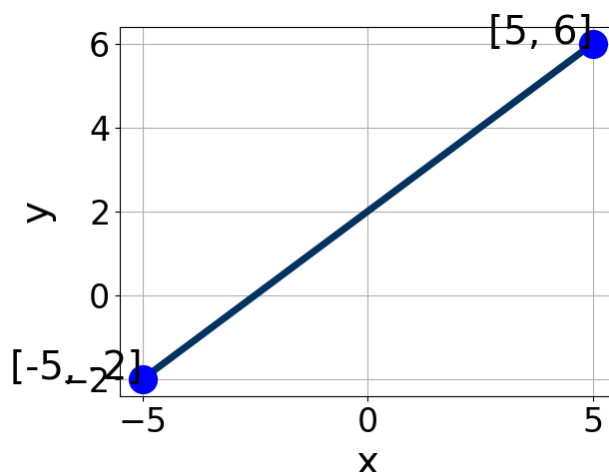
- A. $x \in [1, 2.9]$
B. $x \in [-1.6, 0]$
C. $x \in [-3.4, -1]$
D. $x \in [-6.7, -6]$
E. There are no real solutions.
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3. First, find the equation of the line containing the two points below. Then, write the equation as $y = mx + b$ and choose the intervals that contain m and b .

$$(-7, -7) \text{ and } (-2, 6)$$

- A. $m \in [0.6, 3.6]$ $b \in [11.08, 12.47]$
B. $m \in [0.6, 3.6]$ $b \in [7.73, 8.62]$
C. $m \in [0.6, 3.6]$ $b \in [-11.83, -10.6]$
D. $m \in [-3.6, -0.6]$ $b \in [0.22, 1.11]$
E. $m \in [0.6, 3.6]$ $b \in [-0.43, 0.11]$

4. 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. $A \in [3.7, 4.3]$, $B \in [-5.36, -4.37]$, and $C \in [-11.6, -6]$
B. $A \in [-4.5, -2.7]$, $B \in [4.57, 5.63]$, and $C \in [9.8, 10.9]$
C. $A \in [-2.6, 2.8]$, $B \in [0.81, 1.16]$, and $C \in [1.3, 2.4]$
D. $A \in [3.7, 4.3]$, $B \in [4.57, 5.63]$, and $C \in [9.8, 10.9]$
E. $A \in [-2.6, 2.8]$, $B \in [-1.28, 0.08]$, and $C \in [-3.2, -1.8]$

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

$$-2(-4x - 9) = -18(-17x + 6)$$

- A. $x \in [-0.32, -0.25]$
B. $x \in [0.26, 0.29]$
C. $x \in [0.41, 0.49]$
D. $x \in [0.29, 0.32]$
E. There are no real solutions.

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

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

- A. $x \in [-2.7, 0.7]$
 - B. $x \in [-6.8, -3.6]$
 - C. $x \in [-22.9, -18.5]$
 - D. $x \in [-0.8, 2.7]$
 - E. There are no real solutions.
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7. Solve the equation below. Then, choose the interval that contains the solution.

$$-6(11x - 9) = -2(-5x + 13)$$

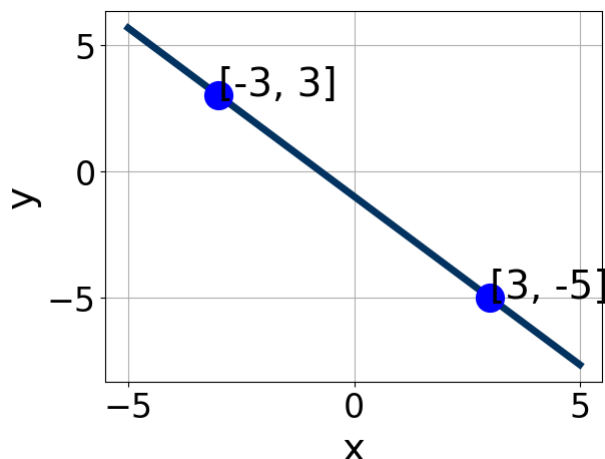
- A. $x \in [0.82, 1.15]$
 - B. $x \in [0.46, 0.55]$
 - C. $x \in [0.32, 0.47]$
 - D. $x \in [-0.57, -0.23]$
 - E. There are no real solutions.
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8. Find the equation of the line described below. Write the linear equation as $y = mx + b$ and choose the intervals that contain m and b .

Parallel to $3x - 5y = 6$ and passing through the point $(-10, -8)$.

- A. $m \in [0.17, 0.84]$ $b \in [0, 4]$
 - B. $m \in [0.17, 0.84]$ $b \in [0, 4]$
 - C. $m \in [0.17, 0.84]$ $b \in [-4, 0]$
 - D. $m \in [0.61, 2.16]$ $b \in [-4, 0]$
 - E. $m \in [-1.3, -0.37]$ $b \in [-16, -5]$
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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. $A \in [1.6, 7.6]$, $B \in [-3.87, -1.85]$, and $C \in [1.66, 3.26]$
B. $A \in [-1.2, 2.3]$, $B \in [0.89, 1.98]$, and $C \in [-1.4, -0.73]$
C. $A \in [-5.5, -0.3]$, $B \in [-3.87, -1.85]$, and $C \in [1.66, 3.26]$
D. $A \in [1.6, 7.6]$, $B \in [2.08, 4.11]$, and $C \in [-3.25, -2.96]$
E. $A \in [-1.2, 2.3]$, $B \in [-2.69, -0.15]$, and $C \in [-0.34, 1.79]$

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

- A. $m \in [-1.47, -1.05]$ $b \in [2.5, 4.5]$
B. $m \in [-1.47, -1.05]$ $b \in [-13.8, -11.3]$
C. $m \in [1.13, 1.25]$ $b \in [-2.1, 2.6]$
D. $m \in [-0.95, -0.62]$ $b \in [12.3, 16]$
E. $m \in [-1.47, -1.05]$ $b \in [12.3, 16]$
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