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.

$$(5, 3) \text{ and } (-7, -6)$$

A. $m \in [0.75, 2.75]$ $b \in [-0.91, -0.64]$

B. $m \in [0.75, 2.75]$ $b \in [0.87, 1.29]$

C. $m \in [0.75, 2.75]$ $b \in [-2.15, -1.76]$

D. $m \in [0.75, 2.75]$ $b \in [0.75, 0.9]$

E. $m \in [-7.75, 0.25]$ $b \in [-11.51, -11.22]$

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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.

Perpendicular to $5x - 7y = 13$ and passing through the point $(-9, 5)$.

A. $m \in [-3.1, -0.9]$ $b \in [5.6, 11.6]$

B. $m \in [-3.1, -0.9]$ $b \in [12, 16]$

C. $m \in [-0.2, 1.7]$ $b \in [14.6, 19.6]$

D. $m \in [-1.1, 1.3]$ $b \in [-11.6, -3.6]$

E. $m \in [-3.1, -0.9]$ $b \in [-11.6, -3.6]$

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

$$-2(9x - 8) = -4(6x - 19)$$

A. $x \in [2.19, 4.19]$

B. $x \in [10, 13]$

C. $x \in [15.33, 19.33]$

D. $x \in [-16.33, -11.33]$

E. There are no real solutions.

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

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

A. $x \in [15, 16.5]$

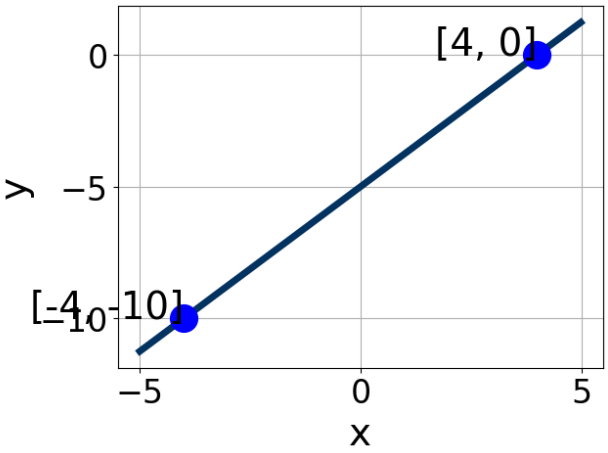
B. $x \in [1.7, 4.2]$

C. $x \in [-1.2, -0.7]$

D. $x \in [0.1, 1]$

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. $A \in [-1.25, 3.75]$, $B \in [-2, 0.6]$, and $C \in [4, 6]$

B. $A \in [-1.25, 3.75]$, $B \in [0.7, 2.3]$, and $C \in [-11, -3]$

C. $A \in [-7, -3]$, $B \in [2.3, 5.8]$, and $C \in [-25, -15]$

D. $A \in [1, 12]$, $B \in [-5.3, -3.2]$, and $C \in [17, 22]$

E. $A \in [1, 12]$, $B \in [2.3, 5.8]$, and $C \in [-25, -15]$

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

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

A. $x \in [-0.39, 2.61]$

B. $x \in [4.92, 7.92]$

C. $x \in [-2.86, 0.14]$

D. $x \in [25.19, 32.19]$

E. There are no real solutions.

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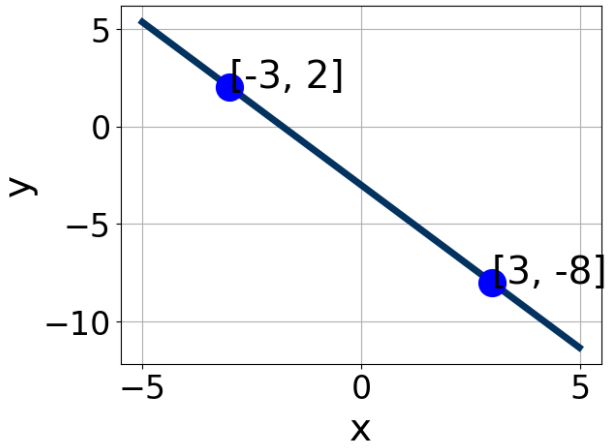
7. Write the equation of the line in the graph below in Standard form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [3.6, 5.3]$, $B \in [2.7, 3.3]$, and $C \in [-11, -8]$

B. $A \in [-0.4, 2]$, $B \in [-2.7, 0.8]$, and $C \in [0, 4]$

C. $A \in [-0.4, 2]$, $B \in [0.6, 2.9]$, and $C \in [-5, -2]$

D. $A \in [-6.4, -0.9]$, $B \in [-5.8, -1.5]$, and $C \in [5, 10]$

E. $A \in [3.6, 5.3]$, $B \in [-5.8, -1.5]$, and $C \in [5, 10]$

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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.

$$(6, 3) \text{ and } (4, 4)$$

A. $m \in [-0.96, -0.03]$ $b \in [5.86, 6.08]$

B. $m \in [-0.96, -0.03]$ $b \in [-3.05, -1.99]$

C. $m \in [-0.96, -0.03]$ $b \in [-6.62, -5.33]$

D. $m \in [-0.96, -0.03]$ $b \in [-0.54, 0.67]$

E. $m \in [0.21, 0.96]$ $b \in [1.63, 3.19]$

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

$$-16(-19x - 18) = -5(13x - 11)$$

A. $x \in [-0.81, -0.47]$

B. $x \in [0.77, 1.1]$

C. $x \in [-1.94, -1.29]$

D. $x \in [-0.94, -0.92]$

E. There are no real solutions.

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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 $3x + 5y = 12$ and passing through the point $(-10, 6)$.

A. $m \in [-1.31, 0.07]$ $b \in [-1, 2]$

B. $m \in [-1.31, 0.07]$ $b \in [13, 21]$

C. $m \in [0.21, 1.16]$ $b \in [11, 14]$

D. $m \in [-1.31, 0.07]$ $b \in [-1, 2]$

E. $m \in [-1.72, -1.59]$ $b \in [-1, 2]$
