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

$$\frac{8x-9}{8} - \frac{-3x+9}{2} = \frac{-7x-3}{7}$$

A. $x \in [-1.5, -0.3]$

B. $x \in [-0.4, 0.6]$

C. $x \in [1.3, 1.7]$

D. $x \in [2.5, 4.4]$

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.

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

A. $m \in [-0.5, 6.1]$ $b \in [-9.71, -9.24]$

B. $m \in [-0.5, 6.1]$ $b \in [-8.01, -7.97]$

C. $m \in [-0.5, 6.1]$ $b \in [-9.36, -8.5]$

D. $m \in [-0.5, 6.1]$ $b \in [9.18, 9.42]$

E. $m \in [-6.1, -0.2]$ $b \in [-2.99, -2.62]$

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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.

$$(-3, 11) \text{ and } (10, -7)$$

A. $m \in [-3.4, 0.5]$ $b \in [-17.2, -15.7]$

B. $m \in [-3.4, 0.5]$ $b \in [11.8, 15.4]$

C. $m \in [-3.4, 0.5]$ $b \in [-7.5, -5.1]$

D. $m \in [-3.4, 0.5]$ $b \in [2.9, 7.9]$

E. $m \in [-0.3, 3.4]$ $b \in [-21.5, -19.3]$

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

$$-7(8x + 11) = -13(10x - 5)$$

A. $x \in [-0.14, 0.01]$

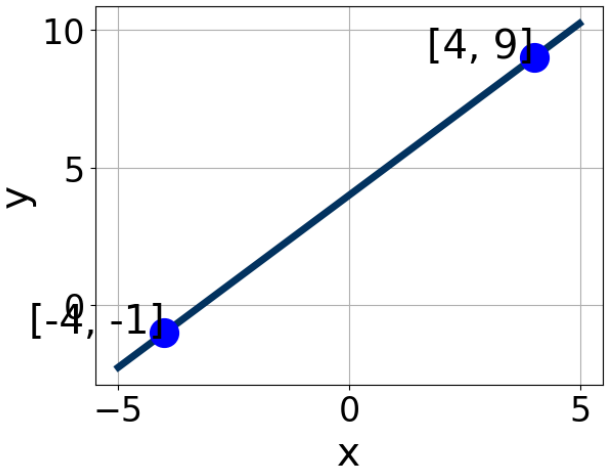
B. $x \in [1.72, 2.08]$

C. $x \in [-0.26, -0.13]$

D. $x \in [0.09, 0.49]$

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. $A \in [-5, -4]$, $B \in [3.8, 6.8]$, and $C \in [14, 23]$

B. $A \in [-1.25, 0.75]$, $B \in [-2, -0.1]$, and $C \in [-8, -2]$

C. $A \in [-1, 7]$, $B \in [3.8, 6.8]$, and $C \in [14, 23]$

D. $A \in [-1.25, 0.75]$, $B \in [-0.3, 3.4]$, and $C \in [0, 6]$

E. $A \in [-1, 7]$, $B \in [-4.4, -3.1]$, and $C \in [-21, -15]$

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

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

A. $x \in [-5.41, -3.61]$

B. $x \in [-0.01, 0.42]$

C. $x \in [0.63, 1.89]$

D. $x \in [3.37, 4.72]$

E. There are no real solutions.

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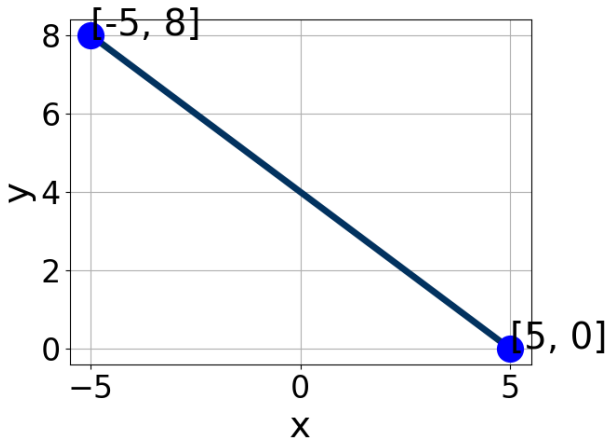
7. Write the equation of the line in the graph below in Standard form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.5, 1.2]$, $B \in [0.3, 3.6]$, and $C \in [4, 6]$

B. $A \in [2.6, 5.1]$, $B \in [4.4, 5.3]$, and $C \in [19, 26]$

C. $A \in [2.6, 5.1]$, $B \in [-5.2, -3.9]$, and $C \in [-20, -12]$

D. $A \in [-1.5, 1.2]$, $B \in [-3, -0.2]$, and $C \in [-5, 2]$

E. $A \in [-7.2, -1.1]$, $B \in [-5.2, -3.9]$, and $C \in [-20, -12]$

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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 $5x + 8y = 7$ and passing through the point $(6, 8)$.

A. $m \in [-0.75, -0.53]$ $b \in [-17.75, -5.75]$

B. $m \in [0.16, 1.85]$ $b \in [4.25, 6.25]$

C. $m \in [-1.96, -1.14]$ $b \in [10.75, 12.75]$

D. $m \in [-0.75, -0.53]$ $b \in [10.75, 12.75]$

E. $m \in [-0.75, -0.53]$ $b \in [-2, 4]$

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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 $9x - 7y = 12$ and passing through the point $(-5, 3)$.

A. $m \in [-1.2, 0.3]$ $b \in [7.43, 8.13]$

B. $m \in [-0.7, 2.2]$ $b \in [6.27, 6.95]$

C. $m \in [-1.2, 0.3]$ $b \in [0.42, 1.3]$

D. $m \in [-1.7, -0.9]$ $b \in [-1.38, -0.12]$

E. $m \in [-1.2, 0.3]$ $b \in [-1.38, -0.12]$

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

$$-7(19x + 17) = -15(-18x + 9)$$

A. $x \in [-0.76, -0.25]$

B. $x \in [-0.27, 0.14]$

C. $x \in [0.61, 0.67]$

D. $x \in [1.26, 1.92]$

E. There are no real solutions.
