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

$$-13(6x + 18) = -4(7x + 17)$$

A. $x \in [-3.4, -3.2]$

B. $x \in [-3.1, -0.2]$

C. $x \in [5.8, 8]$

D. $x \in [-7.6, -5.4]$

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.

$$(-6, -8) \text{ and } (4, 7)$$

A. $m \in [1.5, 8.5]$ $b \in [2.37, 3.66]$

B. $m \in [-4.5, -0.5]$ $b \in [12.85, 13.98]$

C. $m \in [1.5, 8.5]$ $b \in [-2.24, -1.82]$

D. $m \in [1.5, 8.5]$ $b \in [0.42, 2.34]$

E. $m \in [1.5, 8.5]$ $b \in [-1.93, -0.77]$

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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.

$$(-9, 3) \text{ and } (11, -2)$$

A. $m \in [-0.66, 0.07]$ $b \in [11.99, 12.53]$

B. $m \in [-0.66, 0.07]$ $b \in [-1.67, -0.51]$

C. $m \in [-0.66, 0.07]$ $b \in [-13.53, -11.98]$

D. $m \in [-0.15, 1.1]$ $b \in [-5.62, -4.21]$

E. $m \in [-0.66, 0.07]$ $b \in [0.04, 2.07]$

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

$$-12(-13x + 17) = -14(18x - 8)$$

A. $x \in [-0.16, 0.35]$

B. $x \in [0.57, 0.88]$

C. $x \in [-1.07, -0.4]$

D. $x \in [-0.66, 0.15]$

E. There are no real solutions.

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

$$\frac{-5x - 7}{7} - \frac{3x + 7}{2} = \frac{-5x + 5}{8}$$

A. $x \in [-3.9, -3]$

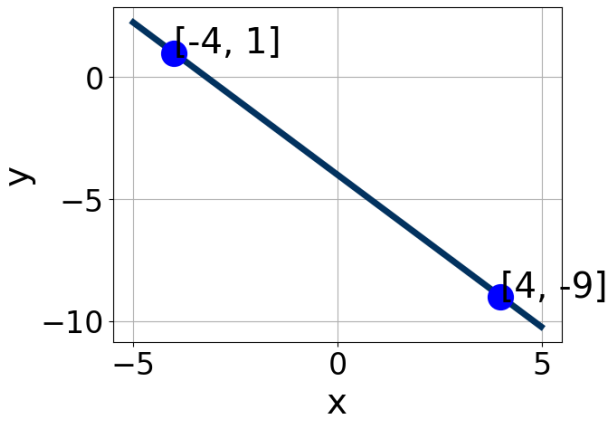
B. $x \in [-1.9, -1.3]$

C. $x \in [-12.1, -11.3]$

D. $x \in [0.3, 1.8]$

E. There are no real solutions.

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. $A \in [5, 8]$, $B \in [3.8, 5.5]$, and $C \in [-18, -14]$

B. $A \in [-8, -4]$, $B \in [-5.1, -3.5]$, and $C \in [14, 20]$

C. $A \in [-0.75, 3.25]$, $B \in [-0.7, 2.3]$, and $C \in [-8, -3]$

D. $A \in [-0.75, 3.25]$, $B \in [-1.3, 0.6]$, and $C \in [-1, 12]$

E. $A \in [5, 8]$, $B \in [-5.1, -3.5]$, and $C \in [14, 20]$

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7. 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 $8x + 5y = 3$ and passing through the point $(-7, -4)$.

A. $m \in [-4.5, -1.3]$ $b \in [-20.2, -11.2]$

B. $m \in [-4.5, -1.3]$ $b \in [0, 4]$

C. $m \in [-0.3, 2.6]$ $b \in [7.2, 9.2]$

D. $m \in [-4.5, -1.3]$ $b \in [15.2, 16.2]$

E. $m \in [-0.8, 0.4]$ $b \in [-20.2, -11.2]$

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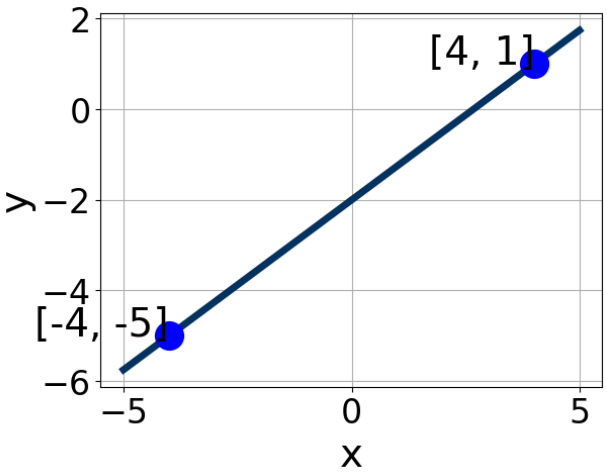
8. Write the equation of the line in the graph below in Standard form $Ax + By = C$. Then, choose the intervals that contain $A, B,$ and C.



A. $A \in [-1.6, 1]$, $B \in [0.3, 1.2]$, and $C \in [-2.2, -0.3]$

B. $A \in [2.4, 4.9]$, $B \in [-4.6, -3.3]$, and $C \in [7.2, 8.8]$

C. $A \in [2.4, 4.9]$, $B \in [2.2, 5.4]$, and $C \in [-10.2, -7.9]$

D. $A \in [-1.6, 1]$, $B \in [-2.2, 0.6]$, and $C \in [0.3, 2.2]$

E. $A \in [-5, -2]$, $B \in [2.2, 5.4]$, and $C \in [-10.2, -7.9]$

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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 $8x + 9y = 3$ and passing through the point $(-7, 3)$.

   A. $m \in [0.97, 1.96]$ $b \in [-11.26, -10.86]$

   B. $m \in [0.97, 1.96]$ $b \in [9.6, 10.7]$

   C. $m \in [-1.15, -0.83]$ $b \in [-5.93, -4.66]$

   D. $m \in [0.31, 1.03]$ $b \in [10.52, 11.26]$

   E. $m \in [0.97, 1.96]$ $b \in [10.52, 11.26]$

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

$$\frac{7x - 9}{4} - \frac{5x - 8}{2} = \frac{-6x - 6}{5}$$

A. $x \in [-12.11, -9.11]$

B. $x \in [-4.37, 0.63]$

C. $x \in [-8.56, -4.56]$

D. $x \in [8.22, 18.22]$

E. There are no real solutions.
