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

$$-15(16x - 11) = -13(-17x + 2)$$

A. $x \in [7.25, 7.55]$

B. $x \in [0.38, 0.47]$

C. $x \in [-0.32, -0.28]$

D. $x \in [0.11, 0.37]$

E. There are no real solutions.

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

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

A. $x \in [-2.54, 2.46]$

B. $x \in [18.22, 23.22]$

C. $x \in [13.26, 14.26]$

D. $x \in [44.7, 50.7]$

E. There are no real solutions.

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.

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

A. $m \in [-3.4, -1.5] \;\; b \in [-5.75, 0.25]$

B. $m \in [-0.9, -0.1] \;\; b \in [-5.75, 0.25]$

C. $m \in [-0.9, -0.1] \;\; b \in [-23, -19]$

D. $m \in [-0.9, -0.1] \;\; b \in [0.75, 6.75]$

E. $m \in [-0.6, 2.2] \;\; b \in [-16.25, -15.25]$

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.

$$(-5, 4) \text{ and } (-11, -10)$$

   A. $m \in [2.33, 7.33]$ $b \in [9.67, 16.67]$

   B. $m \in [2.33, 7.33]$ $b \in [-3, 5]$

   C. $m \in [-7.33, -1.33]$ $b \in [-36.67, -34.67]$

   D. $m \in [2.33, 7.33]$ $b \in [-20.67, -13.67]$

   E. $m \in [2.33, 7.33]$ $b \in [7, 13]$

5. 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.

$$(7, 10) \text{ and } (5, 4)$$

   A. $m \in [-1, 7]$ $b \in [-16, -9]$

   B. $m \in [-1, 7]$ $b \in [6, 13]$

   C. $m \in [-10, 0]$ $b \in [19, 20]$

   D. $m \in [-1, 7]$ $b \in [-2, 0]$

   E. $m \in [-1, 7]$ $b \in [3, 6]$

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.
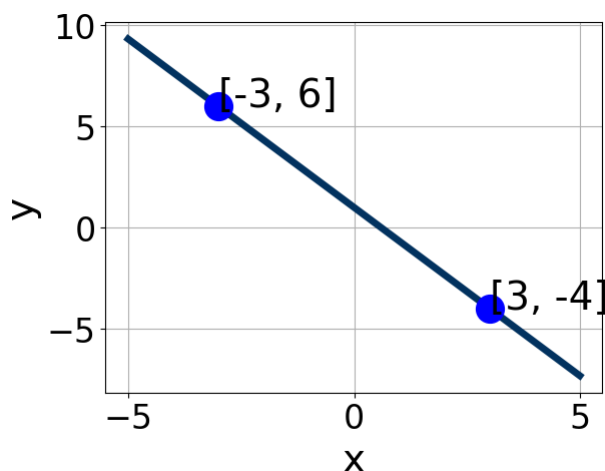
A. $A \in [0.1, 4.2]$, $B \in [-0.55, 2.5]$, and $C \in [-0.56, 1.91]$

B. $A \in [-5.5, -4.5]$, $B \in [-4.02, -1.97]$, and $C \in [-3.6, -2.44]$

C. $A \in [0.1, 4.2]$, $B \in [-2.11, -0.52]$, and $C \in [-1.04, 0.33]$

D. $A \in [3.3, 6.5]$, $B \in [-4.02, -1.97]$, and $C \in [-3.6, -2.44]$

E. $A \in [3.3, 6.5]$, $B \in [2.26, 3.65]$, and $C \in [2.89, 4.33]$

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

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

A. $x \in [0.6, 2.1]$

B. $x \in [2.2, 3.4]$

C. $x \in [8.5, 10.6]$

D. $x \in [-1.2, 0.9]$

E. There are no real solutions.

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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.
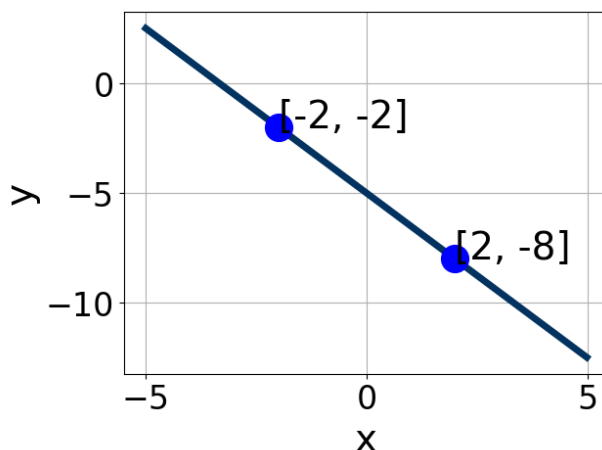
A. $A \in [-3.93, -1.25]$, $B \in [-3.26, -1.3]$, and $C \in [10, 12]$

B. $A \in [0.96, 1.65]$, $B \in [-1.16, -0.92]$, and $C \in [4, 9]$

C. $A \in [2.11, 4.08]$, $B \in [-3.26, -1.3]$, and $C \in [10, 12]$

D. $A \in [2.11, 4.08]$, $B \in [1.93, 2.42]$, and $C \in [-17, -6]$

E. $A \in [0.96, 1.65]$, $B \in [0.85, 1.42]$, and $C \in [-6, 1]$

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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 $3x + 8y = 12$ and passing through the point $(2, 10)$.

   A. $m \in [0.67, 4.67]$ $b \in [-4.67, 2.33]$

   B. $m \in [0.67, 4.67]$ $b \in [6, 9]$

   C. $m \in [-2.62, 1.38]$ $b \in [3.67, 5.67]$

   D. $m \in [0.67, 4.67]$ $b \in [3.67, 5.67]$

   E. $m \in [-4.67, -1.67]$ $b \in [15.33, 18.33]$

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10. Solve the equation below. Then, choose the interval that contains the solution.
$$-18(-16x - 14) = -7(-13x + 12)$$

    A. $x \in [-1.95, -1.04]$

B. $x \in [-1.4, -0.68]$

C. $x \in [0.45, 0.88]$

D. $x \in [-0.65, -0.29]$

E. There are no real solutions.