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

$$\frac{9x-7}{6} - \frac{8x+3}{8} = \frac{6x+4}{7}$$

   A. $x \in [-41.2, -37.2]$

   B. $x \in [-6.92, -4.92]$

   C. $x \in [-1.42, 1.58]$

   D. $x \in [-4.82, -2.82]$

   E. There are no real solutions.

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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.

   Parallel to $7x - 9y = 10$ and passing through the point $(3, 3)$.

   A. $m \in [0.46, 1.07]$ $b \in [0.45, 0.71]$

   B. $m \in [0.94, 1.75]$ $b \in [0.45, 0.71]$

   C. $m \in [-0.95, -0.34]$ $b \in [4.69, 5.83]$

   D. $m \in [0.46, 1.07]$ $b \in [-1.64, -0.32]$

   E. $m \in [0.46, 1.07]$ $b \in [-0.21, 0.48]$

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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.

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

   A. $m \in [-7.67, -1.67]$ $b \in [-17.8, -16.7]$

   B. $m \in [-7.67, -1.67]$ $b \in [16.1, 19]$

   C. $m \in [-7.67, -1.67]$ $b \in [15.9, 16.4]$

   D. $m \in [-0.38, 0.62]$ $b \in [-17.8, -16.7]$

   E. $m \in [-0.33, 6.67]$ $b \in [30.5, 31.1]$

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

$$\frac{6x+5}{7} - \frac{3x+7}{3} = \frac{-4x-4}{5}$$

A. $x \in [-6.49, -5.66]$

B. $x \in [-0.7, 0.66]$

C. $x \in [-3.81, -2.35]$

D. $x \in [0.7, 1.91]$

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.
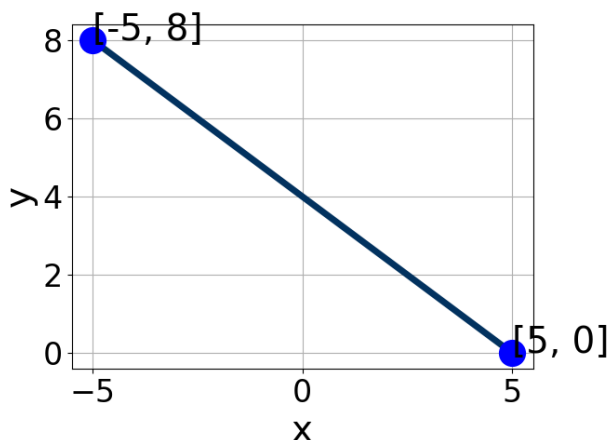
A. $A \in [-0.9, 1.8], \quad B \in [-1.3, -0.7], \quad$ and $\quad C \in [-5, -2]$

B. $A \in [-4.3, -2.6], \quad B \in [-5.3, -4.9], \quad$ and $\quad C \in [-22, -15]$

C. $A \in [-0.9, 1.8], \quad B \in [-0.5, 1.5], \quad$ and $\quad C \in [3, 12]$

D. $A \in [2.2, 5.6], \quad B \in [1.5, 7.3], \quad$ and $\quad C \in [16, 23]$

E. $A \in [2.2, 5.6], \quad B \in [-5.3, -4.9], \quad$ and $\quad C \in [-22, -15]$

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

$$-2(18x - 11) = -15(-17x + 16)$$

A. $x \in [0.86, 0.95]$

B. $x \in [0.7, 0.88]$

C. $x \in [0.99, 1.04]$

D. $x \in [-0.91, -0.7]$

E. There are no real solutions.

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

$$-17(-16x - 15) = -11(-19x - 10)$$

A. $x \in [-4.1, -1.3]$

B. $x \in [4.2, 6.5]$

C. $x \in [-6.1, -5.2]$

D. $x \in [-1.1, 0.4]$

E. There are no real solutions.

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.

$$(-5, 2) \text{ and } (-4, 11)$$

A. $m \in [5, 15]$ $b \in [47, 59]$

B. $m \in [5, 15]$ $b \in [-48, -45]$

C. $m \in [-11, -5]$ $b \in [-28, -21]$

D. $m \in [5, 15]$ $b \in [4, 14]$

E. $m \in [5, 15]$ $b \in [11, 21]$

9. 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.

$$(-5, -2) \text{ and } (-7, -3)$$

A. $m \in [-0.4, 1.8]$ $b \in [0.39, 1.51]$

B. $m \in [-0.4, 1.8]$ $b \in [3.57, 4.53]$

C. $m \in [-2, 0.2]$ $b \in [-7.28, -5.85]$

D. $m \in [-0.4, 1.8]$ $b \in [2.16, 3.1]$

E. $m \in [-0.4, 1.8]$ $b \in [-1.56, -0.05]$

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10. 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.
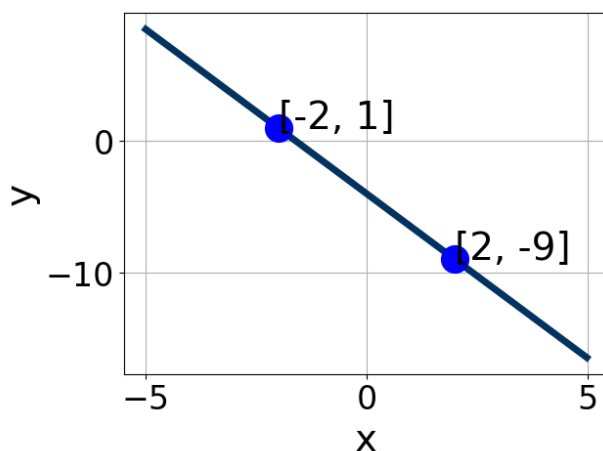
A. $A \in [1.7, 4]$, $B \in [-0.17, 1.98]$, and $C \in [-6, 1]$

B. $A \in [-8.8, -4.3]$, $B \in [-2.22, -1.79]$, and $C \in [7, 16]$

C. $A \in [3.7, 7.4]$, $B \in [1.44, 2.49]$, and $C \in [-11, -7]$

D. $A \in [1.7, 4]$, $B \in [-1.4, -0.3]$, and $C \in [4, 7]$

E. $A \in [3.7, 7.4]$, $B \in [-2.22, -1.79]$, and $C \in [7, 16]$