1. 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 $9x - 4y = 9$ and passing through the point $(-3, 3)$.

   A. $m \in [-1.6, -0.4] \quad b \in [-2.4, -0.3]$

   B. $m \in [-1.6, -0.4] \quad b \in [-0.9, 2.4]$

   C. $m \in [-1.6, -0.4] \quad b \in [4.7, 7.8]$

   D. $m \in [-0.1, 3.6] \quad b \in [3.1, 5.3]$

   E. $m \in [-2.6, -0.8] \quad b \in [-0.9, 2.4]$

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.
$$(-7, -2) \text{ and } (-11, 2)$$

   A. $m \in [-2.6, -0.7] \quad b \in [3.4, 5.5]$

   B. $m \in [-2.6, -0.7] \quad b \in [-10.2, -8.8]$

   C. $m \in [-0.5, 1.3] \quad b \in [11, 16.2]$

   D. $m \in [-2.6, -0.7] \quad b \in [7.9, 10.5]$

   E. $m \in [-2.6, -0.7] \quad b \in [11, 16.2]$

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 $9x - 8y = 9$ and passing through the point $(-4, 5)$.

   A. $m \in [-0.97, -0.48] \quad b \in [1.24, 1.52]$

   B. $m \in [0.8, 1.33] \quad b \in [8.39, 8.96]$

   C. $m \in [-0.97, -0.48] \quad b \in [8.72, 9.01]$

   D. $m \in [-0.97, -0.48] \quad b \in [-1.51, -0.84]$

   E. $m \in [-1.5, -1.07] \quad b \in [1.24, 1.52]$

4. 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.
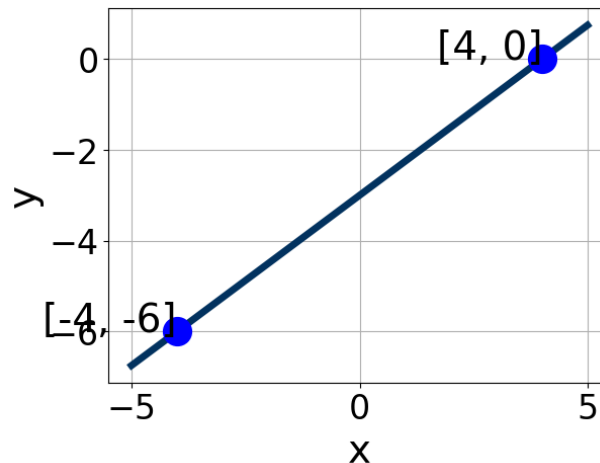
A. $A \in [0.6, 3.2]$, $B \in [-4.25, -3.33]$, and $C \in [9, 16]$

B. $A \in [-3.3, -1.4]$, $B \in [2.39, 4.52]$, and $C \in [-15, -9]$

C. $A \in [0.6, 3.2]$, $B \in [2.39, 4.52]$, and $C \in [-15, -9]$

D. $A \in [-1.4, -0.2]$, $B \in [0.62, 1.44]$, and $C \in [-5, 2]$

E. $A \in [-1.4, -0.2]$, $B \in [-1.04, -0.92]$, and $C \in [0, 7]$

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.
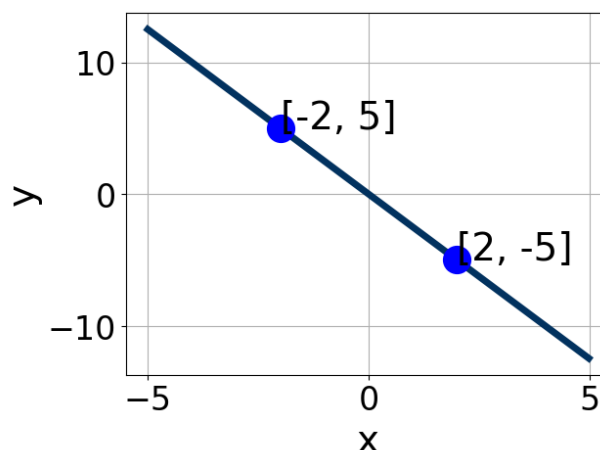
A. $A \in [-2.4, 2.9]$, $B \in [-1.38, -0.75]$, and $C \in [-7, 2]$

B. $A \in [3.1, 5.6]$, $B \in [-2.47, -1.52]$, and $C \in [-7, 2]$

C. $A \in [-7.4, -2.2]$, $B \in [-2.47, -1.52]$, and $C \in [-7, 2]$

D. $A \in [-2.4, 2.9]$, $B \in [0.03, 1.63]$, and $C \in [-7, 2]$

E. $A \in [3.1, 5.6]$, $B \in [1.9, 2.74]$, and $C \in [-7, 2]$

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

$$-13(-6x - 17) = -3(8x - 14)$$

A. $x \in [-2.2, -1]$

B. $x \in [1, 3.4]$

C. $x \in [-2.9, -2.2]$

D. $x \in [-6.8, -4.5]$

E. There are no real solutions.

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

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

A. $x \in [-2.5, -1.88]$

B. $x \in [-0.89, -0.03]$

C. $x \in [-7.11, -6.8]$

D. $x \in [-4.78, -3.63]$

E. There are no real solutions.

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

$$-7(9x + 15) = -13(19x + 8)$$

A. $x \in [-1.24, -0.95]$

B. $x \in [1, 1.2]$

C. $x \in [-0.08, 0.47]$

D. $x \in [-0.87, -0.28]$

E. There are no real solutions.

9. Solve the linear equation below. Then, choose the interval that contains the solution.
$$\frac{3x - 9}{4} - \frac{-7x + 8}{5} = \frac{3x + 8}{3}$$

A. $x \in [5.6, 6.3]$

B. $x \in [1.9, 4.9]$

C. $x \in [21.3, 22.1]$

D. $x \in [-0.1, 2.1]$

E. There are no real solutions.

10. 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.
$$(-6, 6) \text{ and } (-8, -7)$$

A. $m \in [-8.5, -1.5] \quad b \in [-60, -55]$

B. $m \in [3.5, 8.5] \quad b \in [-2, 3]$

C. $m \in [3.5, 8.5] \quad b \in [9, 18]$

D. $m \in [3.5, 8.5] \quad b \in [40, 46]$

E. $m \in [3.5, 8.5] \quad b \in [-51, -36]$