

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

$$-12(6 + 4x) = -11(8x - 14)$$

- A. $x \in [-4, 1]$
 - B. $x \in [-7, -5]$
 - C. $x \in [1, 4]$
 - D. $x \in [2, 8]$
 - 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 .

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

- A. $m \in [-2, 4]$ and $b \in [-0.4, 0.1]$
 - B. $m \in [-1.96, -1.15]$ and $b \in [-20.7, -20.4]$
 - C. $m \in [0, 2]$ and $b \in [-2.8, -2.3]$
 - D. $m \in [0.38, 1.01]$ and $b \in [1, 3]$
 - E. $m \in [0.87, 1.67]$ and $b \in [2.3, 2.7]$
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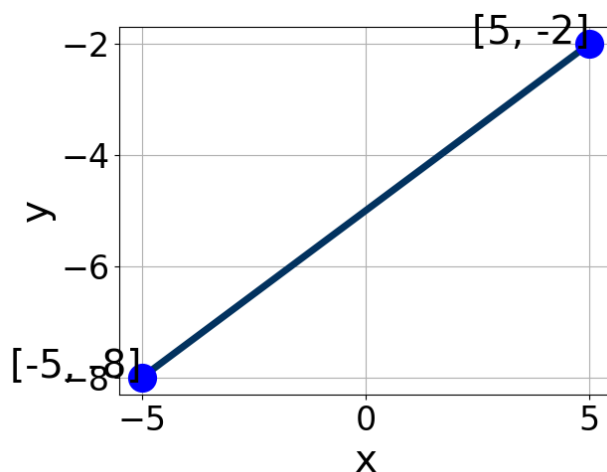
3. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{5x - 3}{2} - \frac{-5x - 3}{8} = \frac{8x + 9}{4}$$

- A. $x \in [2, 3.55]$
- B. $x \in [7.52, 9.26]$
- C. $x \in [3.11, 3.77]$

- D. $x \in [1.54, 1.98]$
- E. There are no Real solutions.

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. $A \in [2.98, 3.01]$, $B \in [-5.17, -4.4]$, and $C \in [23, 27]$
- B. $A \in [4.85, 5.14]$, $B \in [2.78, 4.69]$, and $C \in [-19, -14]$
- C. $A \in [-0.56, 0.19]$, $B \in [0.3, 1.42]$, and $C \in [-7, 3]$
- D. $A \in [-4.06, -2]$, $B \in [4.93, 6.47]$, and $C \in [-27, -20]$
- E. $A \in [0.86, 2.02]$, $B \in [0.3, 1.42]$, and $C \in [-19, -14]$

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 .

$(6, 6)$ and $(-2, -7)$

- A. $m \in [-1, 3]$ and $b \in [-4.7, -2.8]$
- B. $m \in [-7, -1]$ and $b \in [-11, -9]$
- C. $m \in [-2, 5]$ and $b \in [-1.2, 1.7]$

D. $m \in [0, 4]$ and $b \in [-6.3, -4.5]$

E. $m \in [-1, 3]$ and $b \in [3.6, 4.8]$
