

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 $8x - 7y = 7$ and passing through the point $(-6, -9)$.

- A. $m \in [-3, 2]$ and $b \in [-1, 1]$
 - B. $m \in [-3, 1]$ and $b \in [11, 18]$
 - C. $m \in [0.78, 1.18]$ and $b \in [-7, -3]$
 - D. $m \in [-0.96, -0.58]$ and $b \in [-15, -13]$
 - E. $m \in [-1.52, -1]$ and $b \in [-15, -10]$
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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 .

$(7, 9)$ and $(-2, -2)$

- A. $m \in [-3, 4]$ and $b \in [-0.8, -0.34]$
 - B. $m \in [1, 5]$ and $b \in [-0.03, 0.18]$
 - C. $m \in [-1.4, -0.3]$ and $b \in [-4.74, -4.15]$
 - D. $m \in [1.1, 1.5]$ and $b \in [0.23, 0.78]$
 - E. $m \in [0, 5]$ and $b \in [1.76, 2.15]$
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-3(-8 + 6x) = -7(4x - 5)$$

- A. $x \in [0.92, 1.69]$
- B. $x \in [-1.47, -0.35]$

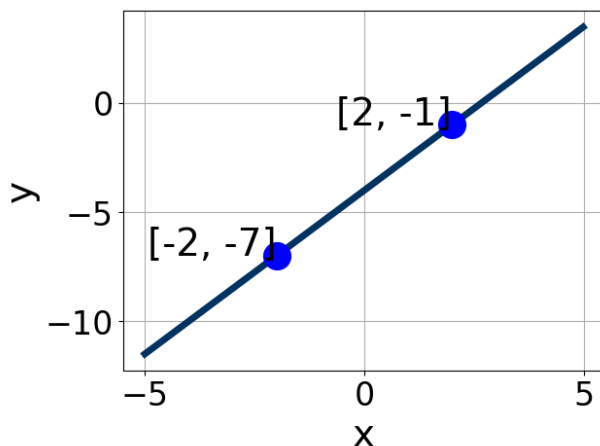
- C. $x \in [-0.14, 0.56]$
- D. $x \in [-6.5, -5.33]$
- E. There are no Real solutions.

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

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

- A. $x \in [2.8, 4.2]$
- B. $x \in [1.7, 2.6]$
- C. $x \in [6.3, 7.7]$
- D. $x \in [1.7, 2.6]$
- 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. $A \in [-0.11, 0.66]$, $B \in [0.86, 1.24]$, and $C \in [-13.6, -11.3]$
- B. $A \in [-3.43, -2.5]$, $B \in [1.77, 2.17]$, and $C \in [-8.5, -5.7]$
- C. $A \in [2.91, 3.68]$, $B \in [-2.27, -1.85]$, and $C \in [4.6, 8.9]$

D. $A \in [1.93, 2.46]$, $B \in [2.72, 3.33]$, and $C \in [-13.6, -11.3]$

E. $A \in [0.33, 1.25]$, $B \in [-1.66, -0.55]$, and $C \in [1.7, 5.4]$
