

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

$$\frac{-7x - 7}{5} - \frac{3x + 6}{7} = \frac{-7x + 9}{6}$$

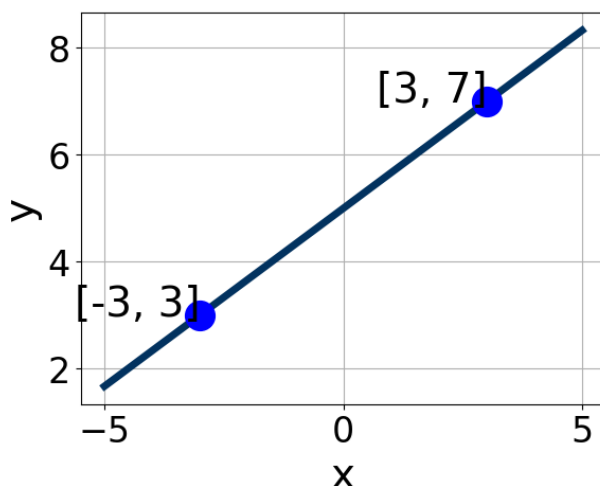
- A. $x \in [-1.9, 0.2]$
 - B. $x \in [-6.1, -5]$
 - C. $x \in [-4.1, -2.5]$
 - D. $x \in [-34.3, -32.9]$
 - E. There are no real solutions.
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2. Find the equation of the line described below. Write the linear equation as $y = mx + b$ and choose the intervals that contain m and b .

Perpendicular to $4x + 7y = 12$ and passing through the point $(7, 4)$.

- A. $m \in [0.93, 3.04]$ $b \in [-5, -2]$
 - B. $m \in [-2.45, -1.54]$ $b \in [14, 19]$
 - C. $m \in [0.36, 1.17]$ $b \in [-10, -6]$
 - D. $m \in [0.93, 3.04]$ $b \in [3, 13]$
 - E. $m \in [0.93, 3.04]$ $b \in [-10, -6]$
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3. 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. $A \in [-2.77, -1.81]$, $B \in [1.3, 5.2]$, and $C \in [13, 19]$
B. $A \in [-0.84, -0.07]$, $B \in [-2.5, -0.9]$, and $C \in [-8, 1]$
C. $A \in [1.78, 2.19]$, $B \in [1.3, 5.2]$, and $C \in [13, 19]$
D. $A \in [-0.84, -0.07]$, $B \in [-0.6, 1.6]$, and $C \in [-3, 6]$
E. $A \in [1.78, 2.19]$, $B \in [-4.6, -2.4]$, and $C \in [-18, -12]$

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

$$-7(8x - 5) = -9(13x - 6)$$

- A. $x \in [-1.49, -1.15]$
B. $x \in [0.02, 0.27]$
C. $x \in [0.62, 0.74]$
D. $x \in [-0.46, 0.02]$
E. There are no real solutions.

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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 .

$(-10, 9)$ and $(-9, -5)$

A. $m \in [-18, -12]$ $b \in [-135, -129]$

B. $m \in [-18, -12]$ $b \in [11, 24]$

C. $m \in [-18, -12]$ $b \in [-1, 7]$

D. $m \in [-18, -12]$ $b \in [124, 136]$

E. $m \in [12, 16]$ $b \in [118, 122]$
