

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

$$\frac{-4x + 9}{7} - \frac{-5x + 8}{4} = \frac{3x + 9}{5}$$

- A. $x \in [-20, -16]$
 - B. $x \in [-2, 0]$
 - C. $x \in [101, 103]$
 - D. $x \in [27, 35]$
 - 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 $6x - 5y = 11$ and passing through the point $(6, -6)$.

- A. $m \in [-2, 1]$ and $b \in [-0.9, 0.4]$
 - B. $m \in [-5, 0]$ and $b \in [0.6, 1.9]$
 - C. $m \in [-1.09, -0.78]$ and $b \in [-1.2, -0.4]$
 - D. $m \in [-1.46, -0.89]$ and $b \in [-3, 0]$
 - E. $m \in [0.38, 1.01]$ and $b \in [-12.1, -10.9]$
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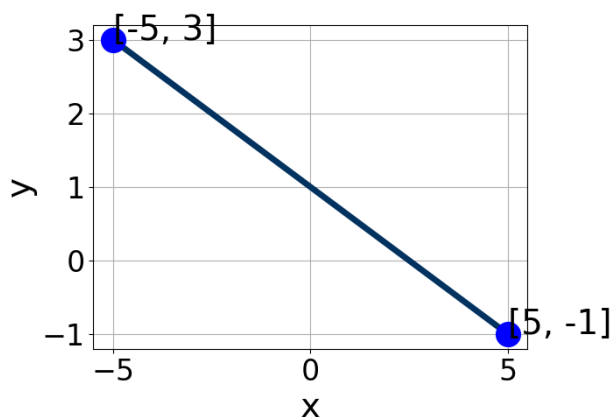
3. First, find the equation of the line containing the two points below. Then, write the equation as $y = mx + b$ and choose the intervals that contain m and b .

$(-5, 9)$ and $(-2, 4)$

- A. $m \in [0, 4]$ and $b \in [7.16, 7.51]$
- B. $m \in [-6, 2]$ and $b \in [13.16, 14.49]$

- C. $m \in [-5, 0]$ and $b \in [-1.1, 0.15]$
D. $m \in [-7, 3]$ and $b \in [5.87, 6.01]$
E. $m \in [-2, -1]$ and $b \in [0.4, 1.06]$

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. $A \in [-2.69, -1.3]$, $B \in [-5.06, -4.21]$, and $C \in [-5.7, -4.4]$
B. $A \in [1.71, 2.21]$, $B \in [4.49, 5.96]$, and $C \in [4.7, 5.1]$
C. $A \in [3.87, 6.24]$, $B \in [-2.87, -1.5]$, and $C \in [-4, -0.9]$
D. $A \in [2.71, 4.06]$, $B \in [-1.35, -0.56]$, and $C \in [-4, -0.9]$
E. $A \in [-0.34, 0.56]$, $B \in [0.97, 1.98]$, and $C \in [-0.7, 2.3]$

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

$$-11(-3 + 13x) = -15(9x - 14)$$

- A. $x \in [18, 24]$
B. $x \in [-23, -21]$
C. $x \in [-3, 3]$
D. $x \in [29, 31]$

E. There are no Real solutions.
