

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

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

- A. $x \in [2, 4.9]$
 - B. $x \in [-4, -2.1]$
 - C. $x \in [-10.7, -6.3]$
 - D. $x \in [1.1, 2.2]$
 - 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 .

Parallel to $7x - 8y = 5$ and passing through the point $(-10, 7)$.

- A. $m \in [0.67, 0.92]$ $b \in [16.8, 19.7]$
 - B. $m \in [-1.04, -0.74]$ $b \in [-1.8, -0.8]$
 - C. $m \in [1.07, 1.37]$ $b \in [15.1, 16]$
 - D. $m \in [0.67, 0.92]$ $b \in [-17.1, -13.3]$
 - E. $m \in [0.67, 0.92]$ $b \in [15.1, 16]$
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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 $9x - 7y = 11$ and passing through the point $(-8, -7)$.

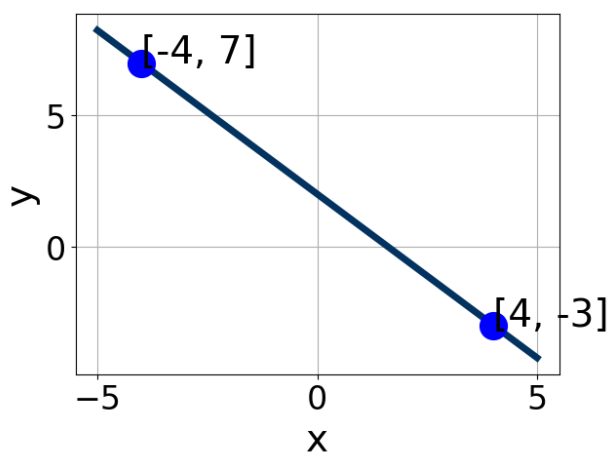
- A. $m \in [-1.03, 0.46]$ $b \in [-16.22, -9.22]$
- B. $m \in [0.23, 1.07]$ $b \in [-2.78, 0.22]$
- C. $m \in [-2.02, -1.07]$ $b \in [-16.22, -9.22]$
- D. $m \in [-1.03, 0.46]$ $b \in [1, 6]$
- E. $m \in [-1.03, 0.46]$ $b \in [9.22, 15.22]$

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

$$\frac{7x - 9}{6} - \frac{7x + 8}{3} = \frac{-3x - 8}{5}$$

- A. $x \in [4.88, 8.88]$
- B. $x \in [-6.53, -1.53]$
- C. $x \in [-0.14, 2.86]$
- D. $x \in [-17.88, -14.88]$
- 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. $A \in [3, 10]$, $B \in [-4.3, -2.9]$, and $C \in [-9.9, -4.3]$
- B. $A \in [1.25, 4.25]$, $B \in [-0.8, 2.1]$, and $C \in [1.2, 3.5]$
- C. $A \in [3, 10]$, $B \in [2.6, 5.3]$, and $C \in [7.3, 9.9]$
- D. $A \in [-5, -3]$, $B \in [-4.3, -2.9]$, and $C \in [-9.9, -4.3]$
- E. $A \in [1.25, 4.25]$, $B \in [-3.3, -0.6]$, and $C \in [-2.7, 0.5]$

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

$$-15(3x - 16) = -19(-17x - 8)$$

- A. $x \in [-1.58, -1.32]$
 - B. $x \in [0.02, 0.64]$
 - C. $x \in [-1.1, -0.89]$
 - D. $x \in [0.73, 1.42]$
 - E. There are no real solutions.
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7. Solve the equation below. Then, choose the interval that contains the solution.

$$-18(-6x + 11) = -12(-19x - 2)$$

- A. $x \in [1.09, 1.96]$
 - B. $x \in [0.46, 0.62]$
 - C. $x \in [-1.64, -0.94]$
 - D. $x \in [-2.12, -1.66]$
 - E. There are no real solutions.
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8. 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 .

$$(-6, 6) \text{ and } (-8, 2)$$

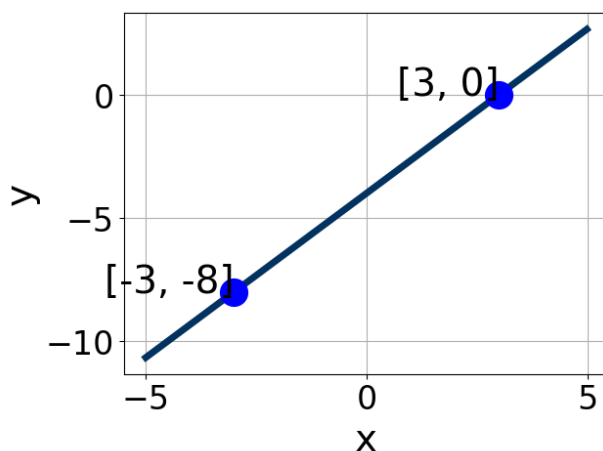
- A. $m \in [1, 7]$ $b \in [11.59, 12.12]$
 - B. $m \in [1, 7]$ $b \in [16.79, 18.46]$
 - C. $m \in [1, 7]$ $b \in [-20.7, -17.61]$
 - D. $m \in [1, 7]$ $b \in [7.87, 11.51]$
 - E. $m \in [-5, 0]$ $b \in [-15.99, -13.79]$
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9. First, find the equation 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 .

$(9, -3)$ and $(11, 6)$

- A. $m \in [0.5, 7.5]$ $b \in [-7, -1]$
- B. $m \in [-6.5, -2.5]$ $b \in [52.5, 57.5]$
- C. $m \in [0.5, 7.5]$ $b \in [-48.5, -39.5]$
- D. $m \in [0.5, 7.5]$ $b \in [42.5, 46.5]$
- E. $m \in [0.5, 7.5]$ $b \in [-14, -11]$

10. 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. $A \in [-2.33, -0.33]$, $B \in [0.68, 1.03]$, and $C \in [-6, -3]$
- B. $A \in [2, 9]$, $B \in [-3.81, -2.52]$, and $C \in [12, 15]$
- C. $A \in [-5, -2]$, $B \in [2.91, 3.7]$, and $C \in [-14, -6]$
- D. $A \in [-2.33, -0.33]$, $B \in [-2.01, 0.22]$, and $C \in [4, 7]$
- E. $A \in [2, 9]$, $B \in [2.91, 3.7]$, and $C \in [-14, -6]$