

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

$$-13(-12x + 6) = -14(-9x - 10)$$

- A. $x \in [6.5, 7.9]$
 - B. $x \in [-3.4, -1.3]$
 - C. $x \in [-1.3, 1]$
 - D. $x \in [1.1, 2.5]$
 - E. There are no real solutions.
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2. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x + 3}{2} - \frac{-4x + 3}{7} = \frac{9x - 4}{4}$$

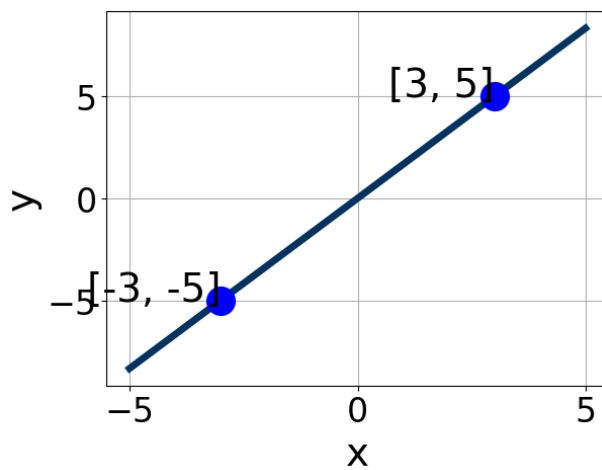
- A. $x \in [19.4, 23.4]$
 - B. $x \in [0.04, 4.04]$
 - C. $x \in [10.6, 13.6]$
 - D. $x \in [15.4, 17.4]$
 - E. There are no real solutions.
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(2x + 19) = -16(18x + 10)$$

- A. $x \in [1.33, 2.82]$
 - B. $x \in [-1.81, -1.36]$
 - C. $x \in [-2.13, -1.86]$
 - D. $x \in [-0.41, 0.7]$
 - E. There are no real solutions.
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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. $A \in [-4.67, 2.33]$, $B \in [0.55, 1.01]$, and $C \in [-3, 1]$
 B. $A \in [-7, -2]$, $B \in [2.05, 4.35]$, and $C \in [-3, 1]$
 C. $A \in [-4.67, 2.33]$, $B \in [-2.07, 0.04]$, and $C \in [-3, 1]$
 D. $A \in [5, 11]$, $B \in [-3.85, -2.46]$, and $C \in [-3, 1]$
 E. $A \in [5, 11]$, $B \in [2.05, 4.35]$, and $C \in [-3, 1]$

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

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

- A. $x \in [21.4, 23.4]$
 B. $x \in [-5.72, 3.28]$
 C. $x \in [-6.2, -1.2]$
 D. $x \in [-20, -17]$
 E. There are no real solutions.

6. 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 $9x + 8y = 4$ and passing through the point $(-4, -6)$.

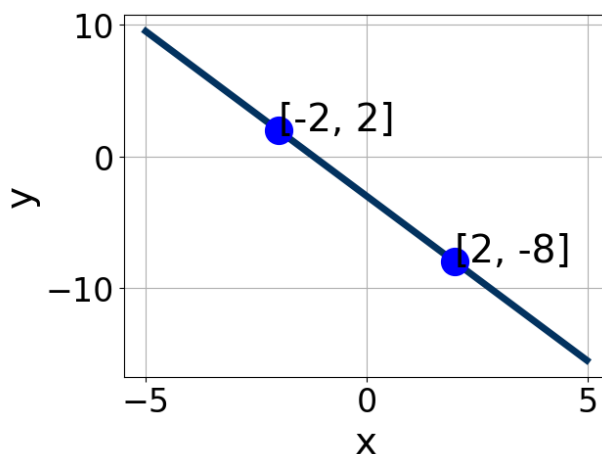
- A. $m \in [-1.14, -0.97]$ $b \in [-11.02, -10.08]$
- B. $m \in [1.03, 1.13]$ $b \in [-1.54, -1.23]$
- C. $m \in [-0.92, -0.85]$ $b \in [-11.02, -10.08]$
- D. $m \in [-1.14, -0.97]$ $b \in [10.34, 10.79]$
- E. $m \in [-1.14, -0.97]$ $b \in [-2.37, -1.85]$

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7. 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 $4x - 3y = 13$ and passing through the point $(-7, 10)$.

- A. $m \in [0.94, 1.92]$ $b \in [17.4, 20.7]$
- B. $m \in [-1.85, -1.23]$ $b \in [-0.4, 3]$
- C. $m \in [0.94, 1.92]$ $b \in [15.9, 18.8]$
- D. $m \in [-0.24, 1.22]$ $b \in [17.4, 20.7]$
- E. $m \in [0.94, 1.92]$ $b \in [-20.1, -18.2]$

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8. 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. $A \in [-2.5, 3.5]$, $B \in [-1.23, 0.17]$, and $C \in [1.4, 4.6]$
 - B. $A \in [-2.5, 3.5]$, $B \in [0.76, 1.01]$, and $C \in [-4.8, -1.8]$
 - C. $A \in [5, 6]$, $B \in [1.94, 2.18]$, and $C \in [-8.4, -4.1]$
 - D. $A \in [5, 6]$, $B \in [-2.09, -1.77]$, and $C \in [4.6, 7.2]$
 - E. $A \in [-6, -2]$, $B \in [-2.09, -1.77]$, and $C \in [4.6, 7.2]$
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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 .

(3, 8) and (7, -10)

- A. $m \in [3.5, 8.5]$ $b \in [-46.5, -38.5]$
 - B. $m \in [-6.5, -2.5]$ $b \in [3, 8]$
 - C. $m \in [-6.5, -2.5]$ $b \in [-25.5, -19.5]$
 - D. $m \in [-6.5, -2.5]$ $b \in [18.5, 24.5]$
 - E. $m \in [-6.5, -2.5]$ $b \in [-17, -15]$
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10. 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 .

(11, -5) and (6, -7)

- A. $m \in [0.1, 2.2]$ $b \in [-15, -10]$
 - B. $m \in [0.1, 2.2]$ $b \in [-9.4, -5.4]$
 - C. $m \in [0.1, 2.2]$ $b \in [-20, -15]$
 - D. $m \in [-1.4, 0.2]$ $b \in [-5.6, 1.4]$
 - E. $m \in [0.1, 2.2]$ $b \in [5.4, 13.4]$
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