

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

$$\frac{-3x + 4}{7} - \frac{6x + 5}{8} = \frac{-3x + 3}{5}$$

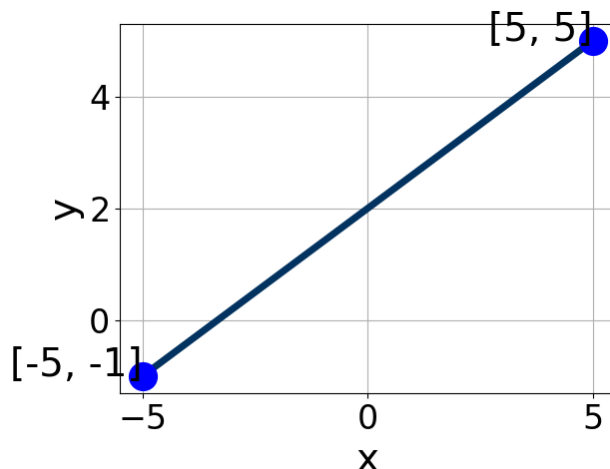
- A. $x \in [-7.65, -5.62]$
 - B. $x \in [-1.45, -0.58]$
 - C. $x \in [0.99, 1.44]$
 - D. $x \in [-0.6, 0.37]$
 - E. There are no real solutions.
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2. First, find the equation of the line containing the two points below. Then, write the equation as $y = mx + b$ and choose the intervals that contain m and b .

$$(-6, 11) \text{ and } (3, 4)$$

- A. $m \in [-2.1, -0.7]$ $b \in [6.03, 8.21]$
 - B. $m \in [-2.1, -0.7]$ $b \in [0.92, 1.05]$
 - C. $m \in [-0.2, 1.1]$ $b \in [1.47, 2.37]$
 - D. $m \in [-2.1, -0.7]$ $b \in [-6.81, -5.38]$
 - E. $m \in [-2.1, -0.7]$ $b \in [15.92, 17.76]$
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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. $A \in [-2.2, 1.1]$, $B \in [-2.9, 0]$, and $C \in [-2, 0]$
 B. $A \in [-2.2, 1.1]$, $B \in [0, 2.3]$, and $C \in [1, 7]$
 C. $A \in [0.9, 4.4]$, $B \in [3.5, 6.5]$, and $C \in [9, 11]$
 D. $A \in [0.9, 4.4]$, $B \in [-5.6, -4.1]$, and $C \in [-18, -3]$
 E. $A \in [-3.5, -2.3]$, $B \in [3.5, 6.5]$, and $C \in [9, 11]$

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

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

- A. $x \in [-17.42, -15.42]$
 B. $x \in [-0.79, 1.21]$
 C. $x \in [-6.84, -4.84]$
 D. $x \in [-5.62, -1.62]$
 E. There are no real solutions.

5. 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 $7x - 5y = 14$ and passing through the point $(-3, 7)$.

- A. $m \in [-1.11, -0.15]$ $b \in [-5.16, -4.77]$
 - B. $m \in [-1.11, -0.15]$ $b \in [3.36, 5.13]$
 - C. $m \in [-1.11, -0.15]$ $b \in [9.81, 10.68]$
 - D. $m \in [0.29, 1.74]$ $b \in [8.53, 9.62]$
 - E. $m \in [-1.89, -0.76]$ $b \in [3.36, 5.13]$
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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 $6x - 5y = 3$ and passing through the point $(3, -7)$.

- A. $m \in [1.16, 1.39]$ $b \in [-10.82, -10.35]$
 - B. $m \in [1.16, 1.39]$ $b \in [10.01, 10.65]$
 - C. $m \in [0.02, 1.15]$ $b \in [-10.82, -10.35]$
 - D. $m \in [-1.93, -0.58]$ $b \in [-4.02, -3.1]$
 - E. $m \in [1.16, 1.39]$ $b \in [-10.01, -9.77]$
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7. 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 .

$(-8, 7)$ and $(4, 11)$

- A. $m \in [-0.13, 0.51]$ $b \in [5.49, 8.68]$
 - B. $m \in [-1.46, 0.05]$ $b \in [11.91, 13.47]$
 - C. $m \in [-0.13, 0.51]$ $b \in [-10.73, -9.01]$
 - D. $m \in [-0.13, 0.51]$ $b \in [13.63, 16.14]$
 - E. $m \in [-0.13, 0.51]$ $b \in [9.28, 10.04]$
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8. Solve the equation below. Then, choose the interval that contains the solution.

$$-4(-13x - 11) = -12(-2x + 7)$$

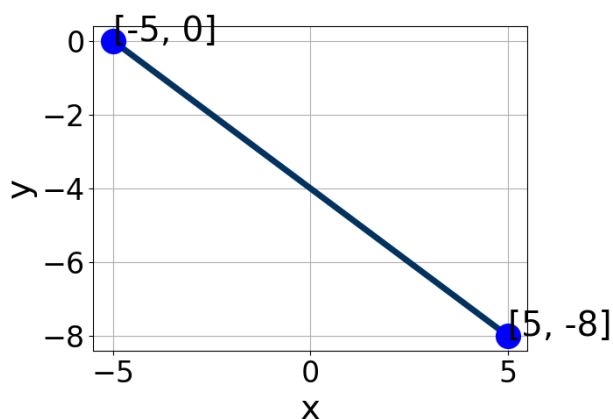
- A. $x \in [1.12, 1.46]$
 - B. $x \in [-2.51, -1.33]$
 - C. $x \in [-5.82, -4.35]$
 - D. $x \in [-0.04, 1.19]$
 - E. There are no real solutions.
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9. Solve the equation below. Then, choose the interval that contains the solution.

$$-17(-11x - 3) = -8(-7x + 2)$$

- A. $x \in [-0.02, 0.36]$
 - B. $x \in [-0.21, 0.09]$
 - C. $x \in [-0.57, -0.5]$
 - D. $x \in [-0.28, -0.22]$
 - E. There are no real solutions.
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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. $A \in [4, 9]$, $B \in [3.6, 5.5]$, and $C \in [-21, -17]$
- B. $A \in [-6, -2]$, $B \in [-9, -2]$, and $C \in [17, 24]$
- C. $A \in [4, 9]$, $B \in [-9, -2]$, and $C \in [17, 24]$

D. $A \in [-2.2, 3.8]$, $B \in [-0.5, 3.3]$, and $C \in [-8, -2]$

E. $A \in [-2.2, 3.8]$, $B \in [-3.3, 0.8]$, and $C \in [2, 5]$
