

1. 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 .

$$(-7, -6) \text{ and } (8, 4)$$

- A. $m \in [-0.1, 1.2]$ $b \in [-4.35, -3.6]$
B. $m \in [-0.1, 1.2]$ $b \in [0.62, 1.27]$
C. $m \in [-0.1, 1.2]$ $b \in [-1.51, -1.16]$
D. $m \in [-2.5, -0.5]$ $b \in [9.3, 9.44]$
E. $m \in [-0.1, 1.2]$ $b \in [1.29, 1.82]$
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2. Solve the linear equation below. Then, choose the interval that contains the solution.

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

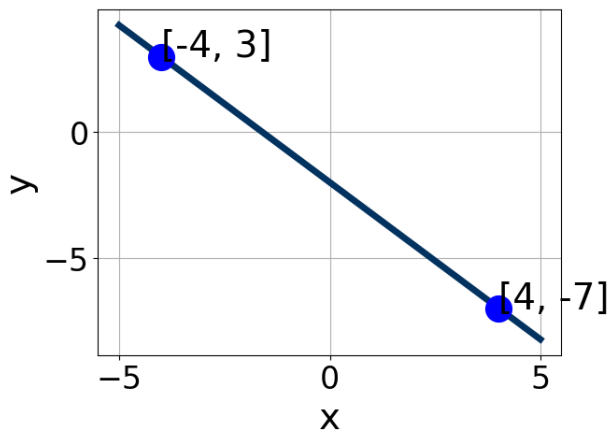
- A. $x \in [-4.29, -3.52]$
B. $x \in [-0.78, 0.67]$
C. $x \in [0.86, 1.32]$
D. $x \in [-1.93, -1.19]$
E. There are no real solutions.
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3. First, find the equation of the line containing the two points below. Then, write the equation as $y = mx + b$ and choose the intervals that contain m and b .

$$(-8, -2) \text{ and } (4, 5)$$

- A. $m \in [-0.42, 3.58]$ $b \in [0.71, 1.46]$
B. $m \in [-0.42, 3.58]$ $b \in [2.12, 2.74]$
C. $m \in [-6.58, 0.42]$ $b \in [6.99, 8.23]$
D. $m \in [-0.42, 3.58]$ $b \in [4.97, 6.06]$
E. $m \in [-0.42, 3.58]$ $b \in [-2.81, -1.78]$

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. $A \in [-4.75, 2.25]$, $B \in [-2.6, -0.2]$, and $C \in [0, 4]$
B. $A \in [5, 9]$, $B \in [-4.9, -2.5]$, and $C \in [8, 12]$
C. $A \in [5, 9]$, $B \in [1.6, 5.3]$, and $C \in [-15, -3]$
D. $A \in [-4.75, 2.25]$, $B \in [-0.7, 1.4]$, and $C \in [-7, 0]$
E. $A \in [-7, -2]$, $B \in [-4.9, -2.5]$, and $C \in [8, 12]$

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

$$-4(-14x - 5) = -3(10x + 9)$$

- A. $x \in [0.17, 0.3]$
B. $x \in [-0.76, -0.39]$
C. $x \in [-0.01, 0.13]$
D. $x \in [-0.12, 0.02]$
E. There are no real solutions.

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

the solution.

$$\frac{7x + 4}{3} - \frac{6x + 9}{2} = \frac{6x + 9}{8}$$

- A. $x \in [3.32, 5.32]$
- B. $x \in [-4.03, -2.03]$
- C. $x \in [-1.86, 1.14]$
- D. $x \in [-11.88, -4.88]$
- E. There are no real solutions.

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

$$-4(15x + 7) = -9(14x + 3)$$

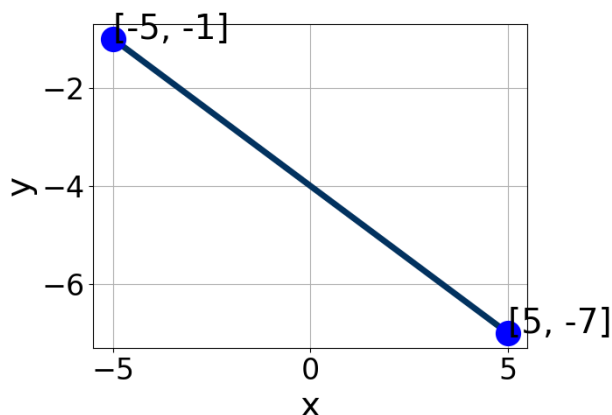
- A. $x \in [-0.92, -0.66]$
- B. $x \in [0.48, 0.97]$
- C. $x \in [-0.08, 0.11]$
- D. $x \in [-0.62, -0.25]$
- E. There are no real solutions.

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8. 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 $8x + 9y = 4$ and passing through the point $(3, 10)$.

- A. $m \in [1.03, 1.25]$ $b \in [-6.78, -6.24]$
- B. $m \in [-1.17, -1.05]$ $b \in [13.26, 13.46]$
- C. $m \in [1.03, 1.25]$ $b \in [6.67, 7.04]$
- D. $m \in [0.8, 1.01]$ $b \in [6.62, 6.88]$
- E. $m \in [1.03, 1.25]$ $b \in [6.62, 6.88]$

9. 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. $A \in [2, 3.7]$, $B \in [-5.25, -3.75]$, and $C \in [20, 24]$
B. $A \in [-1.1, 2.3]$, $B \in [-0.06, 1.94]$, and $C \in [-5, 2]$
C. $A \in [2, 3.7]$, $B \in [4.56, 6.16]$, and $C \in [-20, -19]$
D. $A \in [-1.1, 2.3]$, $B \in [-1.41, -0.72]$, and $C \in [4, 6]$
E. $A \in [-5.3, -2.3]$, $B \in [-5.25, -3.75]$, and $C \in [20, 24]$

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10. 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 $9x + 7y = 14$ and passing through the point $(-7, 7)$.

- A. $m \in [0.73, 1.14]$ $b \in [-13.44, -8.44]$
B. $m \in [-0.9, -0.36]$ $b \in [-3.44, 2.56]$
C. $m \in [1.13, 1.51]$ $b \in [10.44, 13.44]$
D. $m \in [0.73, 1.14]$ $b \in [10.44, 13.44]$
E. $m \in [0.73, 1.14]$ $b \in [14, 18]$
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