

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 .

$$(10, -3) \text{ and } (-10, -2)$$

- A. $m \in [-0.3, -0.03]$ $b \in [7.23, 8.07]$
 - B. $m \in [0, 0.19]$ $b \in [-1.83, -1.23]$
 - C. $m \in [-0.3, -0.03]$ $b \in [-14.06, -12.54]$
 - D. $m \in [-0.3, -0.03]$ $b \in [1.51, 2.57]$
 - E. $m \in [-0.3, -0.03]$ $b \in [-3.76, -2.48]$
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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 $5x + 8y = 13$ and passing through the point $(-8, 3)$.

- A. $m \in [-1.21, -0.06]$ $b \in [10.1, 11.1]$
 - B. $m \in [-1.21, -0.06]$ $b \in [1.7, 3.5]$
 - C. $m \in [-1.21, -0.06]$ $b \in [-3.6, -1.3]$
 - D. $m \in [-2.71, -1.36]$ $b \in [-3.6, -1.3]$
 - E. $m \in [0.13, 0.91]$ $b \in [7.9, 10.7]$
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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 $8x + 3y = 13$ and passing through the point $(5, 4)$.

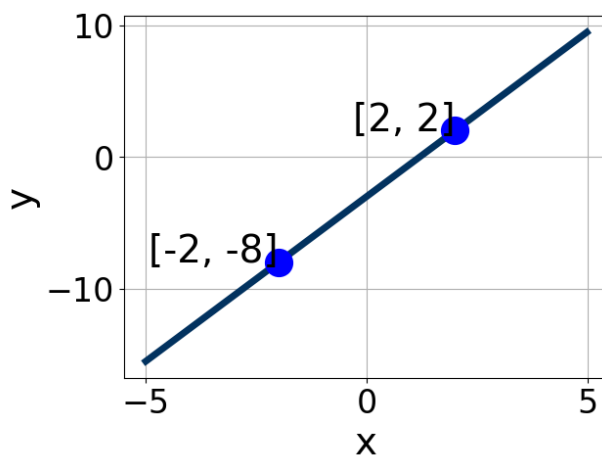
- A. $m \in [2.47, 3.05]$ $b \in [0.6, 2.7]$
- B. $m \in [0.32, 0.75]$ $b \in [0.6, 2.7]$
- C. $m \in [0.32, 0.75]$ $b \in [-1.9, 0.4]$
- D. $m \in [0.32, 0.75]$ $b \in [-5.1, -1.5]$
- E. $m \in [-0.54, -0.03]$ $b \in [4.4, 7.6]$

4. 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 .

$(3, 9)$ and $(-10, 3)$

- A. $m \in [-0.1, 2.6]$ $b \in [6.1, 8.4]$
B. $m \in [-0.1, 2.6]$ $b \in [4.6, 7.4]$
C. $m \in [-0.1, 2.6]$ $b \in [-10.8, -5.7]$
D. $m \in [-1.4, 0.3]$ $b \in [-3.1, 2.3]$
E. $m \in [-0.1, 2.6]$ $b \in [12.9, 15.1]$

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. $A \in [3.1, 6.5]$, $B \in [1.93, 2.16]$, and $C \in [-8.4, -5.6]$
B. $A \in [-5.7, -4.5]$, $B \in [1.93, 2.16]$, and $C \in [-8.4, -5.6]$
C. $A \in [-4.3, -0.8]$, $B \in [0.43, 1.15]$, and $C \in [-5.5, 0.3]$
D. $A \in [3.1, 6.5]$, $B \in [-2.82, -1.89]$, and $C \in [3.8, 6.5]$
E. $A \in [-4.3, -0.8]$, $B \in [-1.14, -0.87]$, and $C \in [-0.2, 3.2]$

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

$$-12(-15x - 6) = -17(-3x + 2)$$

- A. $x \in [-0.84, -0.6]$
 - B. $x \in [0.04, 0.49]$
 - C. $x \in [-0.6, -0.26]$
 - D. $x \in [-0.23, 0.01]$
 - E. There are no real solutions.
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7. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{7x - 9}{2} - \frac{8x - 9}{7} = \frac{9x - 5}{3}$$

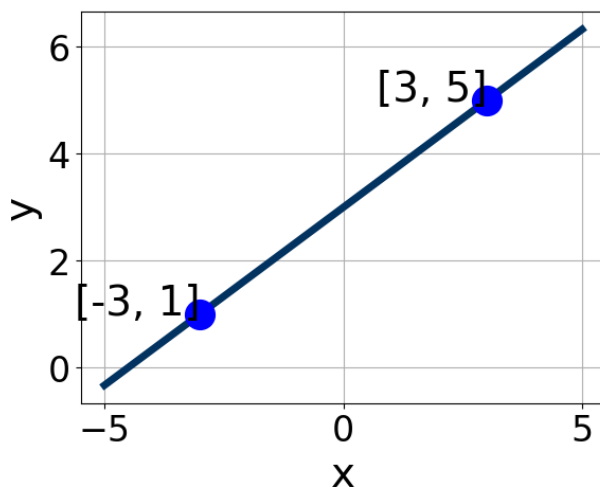
- A. $x \in [-1.15, 2.85]$
 - B. $x \in [-6.41, -5.41]$
 - C. $x \in [5.78, 9.78]$
 - D. $x \in [-2.41, -1.41]$
 - E. There are no real solutions.
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8. Solve the linear equation below. Then, choose the interval that contains the solution.

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

- A. $x \in [0, 0.7]$
 - B. $x \in [-10.3, -8.7]$
 - C. $x \in [-2.6, -0.4]$
 - D. $x \in [1.3, 1.6]$
 - E. There are no real solutions.
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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. $A \in [1.4, 3.3]$, $B \in [-3.26, -2.93]$, and $C \in [-9, -8]$
B. $A \in [-1.7, -0.6]$, $B \in [0.56, 1.73]$, and $C \in [3, 6]$
C. $A \in [-3.7, -1.7]$, $B \in [2.95, 4.21]$, and $C \in [8, 16]$
D. $A \in [-1.7, -0.6]$, $B \in [-2.98, -0.93]$, and $C \in [-5, 1]$
E. $A \in [1.4, 3.3]$, $B \in [2.95, 4.21]$, and $C \in [8, 16]$
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10. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(4x + 14) = -11(9x - 7)$$

- A. $x \in [3.54, 4.14]$
B. $x \in [-0.9, 0.01]$
C. $x \in [-2.08, -0.99]$
D. $x \in [0.6, 1.74]$
E. There are no real solutions.
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