

1. 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 $3x - 4y = 14$ and passing through the point $(-10, 8)$.

- A. $m \in [-0.2, 0.95]$ $b \in [-21.5, -14.5]$
 - B. $m \in [-0.2, 0.95]$ $b \in [18, 19]$
 - C. $m \in [-0.2, 0.95]$ $b \in [15.5, 17.5]$
 - D. $m \in [-1.15, -0.72]$ $b \in [-3.5, 2.5]$
 - E. $m \in [0.89, 2.2]$ $b \in [15.5, 17.5]$
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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 .

$(-7, -9)$ and $(11, -11)$

- A. $m \in [-0.16, 0.02]$ $b \in [6.7, 11.8]$
 - B. $m \in [-0.16, 0.02]$ $b \in [-10.8, -7.2]$
 - C. $m \in [-0.16, 0.02]$ $b \in [-4.7, 0.7]$
 - D. $m \in [-0.16, 0.02]$ $b \in [-24.7, -19.3]$
 - E. $m \in [-0.02, 0.33]$ $b \in [-15.4, -11.6]$
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3. Solve the equation below. Then, choose the interval that contains the solution.

$$-6(-4x - 5) = -7(-17x - 3)$$

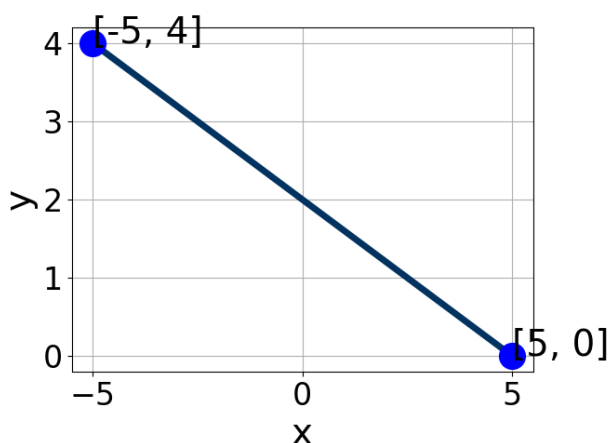
- A. $x \in [0.09, 0.34]$
- B. $x \in [0.29, 0.55]$
- C. $x \in [-0.42, -0.13]$
- D. $x \in [-0.6, -0.5]$
- E. There are no real solutions.

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

$$\frac{6x + 5}{7} - \frac{9x + 5}{6} = \frac{-4x + 7}{3}$$

- A. $x \in [1.9, 3.4]$
- B. $x \in [3.5, 5]$
- C. $x \in [0.1, 1.8]$
- D. $x \in [9.1, 10.5]$
- 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. $A \in [1.6, 2.85]$, $B \in [-6.5, -4.6]$, and $C \in [-10, -3]$
- B. $A \in [-2.55, -0.55]$, $B \in [-6.5, -4.6]$, and $C \in [-10, -3]$
- C. $A \in [0.22, 1.05]$, $B \in [-0.6, 2.2]$, and $C \in [1, 4]$
- D. $A \in [0.22, 1.05]$, $B \in [-1.8, 0.6]$, and $C \in [-3, 1]$
- E. $A \in [1.6, 2.85]$, $B \in [4, 5.6]$, and $C \in [9, 14]$

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

$$\frac{-8x + 5}{7} - \frac{-6x - 5}{2} = \frac{5x - 7}{3}$$

- A. $x \in [-2.88, -0.88]$
 - B. $x \in [-1.21, 4.79]$
 - C. $x \in [-92.25, -86.25]$
 - D. $x \in [-30.12, -28.12]$
 - E. There are no real solutions.
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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 .

$$(3, -10) \text{ and } (11, -11)$$

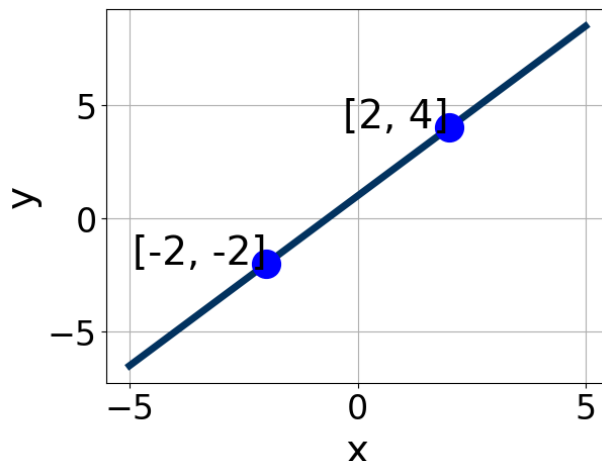
- A. $m \in [-0.14, -0.04]$ $b \in [-13.98, -12.81]$
 - B. $m \in [-0.14, -0.04]$ $b \in [-22.43, -21.83]$
 - C. $m \in [-0.09, 0.13]$ $b \in [-12.54, -12.35]$
 - D. $m \in [-0.14, -0.04]$ $b \in [9.02, 10]$
 - E. $m \in [-0.14, -0.04]$ $b \in [-9.71, -9.03]$
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8. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(3x - 12) = -6(19x + 14)$$

- A. $x \in [0.13, 0.18]$
- B. $x \in [-2.02, -1.91]$
- C. $x \in [-0.18, -0.04]$
- D. $x \in [0.05, 0.09]$
- E. There are no real solutions.

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. $A \in [0.4, 3.3]$, $B \in [-2.27, -1.7]$, and $C \in [-2.2, -1.64]$
B. $A \in [0.4, 3.3]$, $B \in [1.93, 2.73]$, and $C \in [1.73, 2.45]$
C. $A \in [-2.6, -0.2]$, $B \in [-1.73, -0.39]$, and $C \in [-1.83, 0.55]$
D. $A \in [-2.6, -0.2]$, $B \in [0.74, 1.42]$, and $C \in [0.89, 1.15]$
E. $A \in [-6.7, -1.7]$, $B \in [1.93, 2.73]$, and $C \in [1.73, 2.45]$

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 .

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

- A. $m \in [0.42, 0.77]$ $b \in [-1.24, -0.55]$
B. $m \in [0.42, 0.77]$ $b \in [-0.4, 0.25]$
C. $m \in [1.04, 1.59]$ $b \in [0.47, 2.22]$
D. $m \in [-1.63, -0.69]$ $b \in [4.45, 6.16]$
E. $m \in [0.42, 0.77]$ $b \in [0.47, 2.22]$