

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

$$-3(15x + 2) = -8(13x + 16)$$

- A. $x \in [-2.88, -2.09]$
 - B. $x \in [-2.19, -2.04]$
 - C. $x \in [-1.33, -0.59]$
 - D. $x \in [1.79, 2.35]$
 - E. There are no real solutions.
-

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 .

$$(-10, -8) \text{ and } (-4, -7)$$

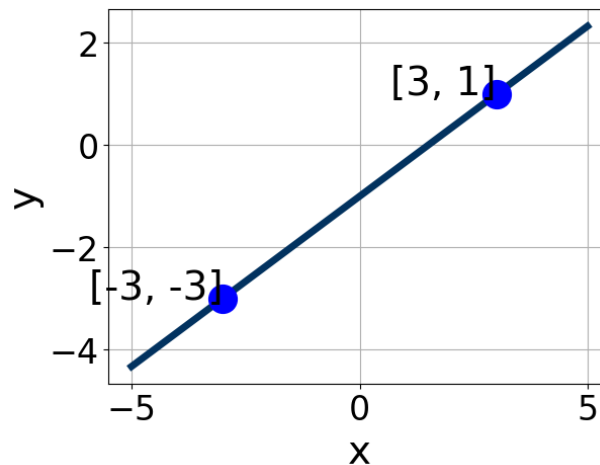
- A. $m \in [0.11, 0.28]$ $b \in [-3.3, -1.6]$
 - B. $m \in [0.11, 0.28]$ $b \in [6.2, 7.5]$
 - C. $m \in [0.11, 0.28]$ $b \in [-7.6, -5.5]$
 - D. $m \in [-0.3, -0.01]$ $b \in [-7.9, -6.8]$
 - E. $m \in [0.11, 0.28]$ $b \in [1.6, 5.1]$
-

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 .

$$\text{Parallel to } 8x - 3y = 6 \text{ and passing through the point } (10, 2).$$

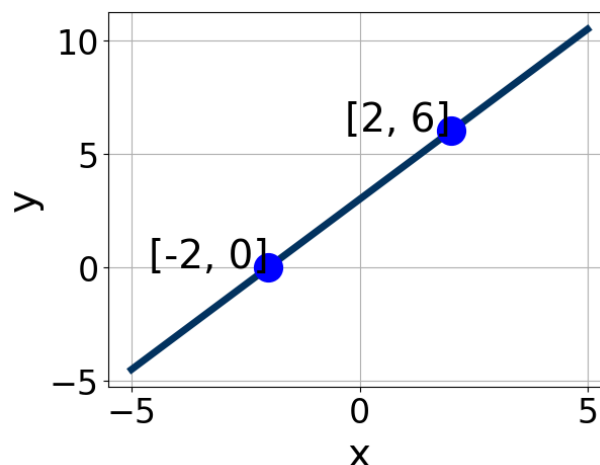
- A. $m \in [0.2, 1.1]$ $b \in [-25.67, -17.67]$
- B. $m \in [1.8, 3]$ $b \in [-9, -1]$
- C. $m \in [1.8, 3]$ $b \in [22.67, 25.67]$
- D. $m \in [-3, -1.9]$ $b \in [25.67, 34.67]$
- E. $m \in [1.8, 3]$ $b \in [-25.67, -17.67]$

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. $A \in [-1.77, 0.51]$, $B \in [-0.22, 1.07]$, and $C \in [-2.3, -0.9]$
 B. $A \in [-1.77, 0.51]$, $B \in [-1.78, 0.19]$, and $C \in [0.6, 2.6]$
 C. $A \in [-3.32, -1.49]$, $B \in [1.76, 3.04]$, and $C \in [-5.2, -2.1]$
 D. $A \in [1.21, 3.16]$, $B \in [-4.03, -2.14]$, and $C \in [2.9, 6.6]$
 E. $A \in [1.21, 3.16]$, $B \in [1.76, 3.04]$, and $C \in [-5.2, -2.1]$

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. $A \in [-2.42, -0.87]$, $B \in [0.98, 1.99]$, and $C \in [0.5, 3.5]$
 - B. $A \in [-3.85, -2.46]$, $B \in [1.73, 2.83]$, and $C \in [3.8, 6.1]$
 - C. $A \in [2.88, 3.56]$, $B \in [1.73, 2.83]$, and $C \in [3.8, 6.1]$
 - D. $A \in [2.88, 3.56]$, $B \in [-2.34, -1.86]$, and $C \in [-6.1, -5.5]$
 - E. $A \in [-2.42, -0.87]$, $B \in [-1.47, -0.7]$, and $C \in [-4.4, -0.5]$
-

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

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

- A. $x \in [-1.7, -0.2]$
 - B. $x \in [9.7, 12.1]$
 - C. $x \in [2.9, 4.3]$
 - D. $x \in [1.4, 2.6]$
 - E. There are no real solutions.
-

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 $9x + 5y = 12$ and passing through the point $(2, 5)$.

- A. $m \in [-5.8, -0.8]$ $b \in [2, 3.7]$
 - B. $m \in [-5.8, -0.8]$ $b \in [7.9, 9]$
 - C. $m \in [-5.8, -0.8]$ $b \in [-11, -7.6]$
 - D. $m \in [-1.56, 0.44]$ $b \in [7.9, 9]$
 - E. $m \in [1.8, 4.8]$ $b \in [-0.4, 2.2]$
-

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

$$-18(2x + 14) = -4(-10x + 15)$$

- A. $x \in [1.6, 6.5]$
- B. $x \in [-5.9, -3.1]$
- C. $x \in [76.2, 78.6]$
- D. $x \in [-2.8, -1.8]$
- E. There are no real solutions.

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 .

$$(3, -11) \text{ and } (-7, -10)$$

- A. $m \in [-0.18, -0.04]$ $b \in [-3.99, -2.97]$
- B. $m \in [-0, 0.17]$ $b \in [-9.75, -8.24]$
- C. $m \in [-0.18, -0.04]$ $b \in [10.68, 10.79]$
- D. $m \in [-0.18, -0.04]$ $b \in [-14.35, -13.38]$
- E. $m \in [-0.18, -0.04]$ $b \in [-12.55, -10.32]$

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

$$\frac{-8x - 7}{7} - \frac{3x + 7}{2} = \frac{-5x + 4}{8}$$

- A. $x \in [0.1, 1.7]$
- B. $x \in [-9.7, -8.3]$
- C. $x \in [-2.3, -0.5]$
- D. $x \in [-4.1, -2.4]$
- E. There are no real solutions.