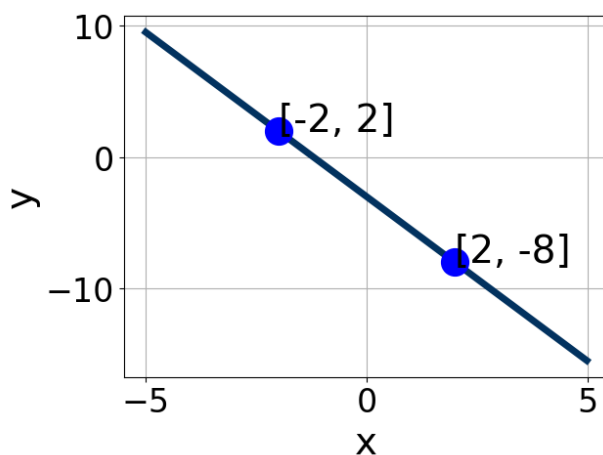


1. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{8x - 7}{5} - \frac{6x - 5}{4} = \frac{-4x - 9}{7}$$

- A. $x \in [1.8, 2.1]$
 - B. $x \in [-3.5, -0.6]$
 - C. $x \in [-12, -10.3]$
 - D. $x \in [-1.6, 0.2]$
 - E. There are no real solutions.
-

2. 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. $A \in [-6, -4.1]$, $B \in [-2.48, -1.3]$, and $C \in [5.28, 6.98]$
 - B. $A \in [3, 7.5]$, $B \in [1.84, 2.05]$, and $C \in [-6.65, -5.43]$
 - C. $A \in [2, 3]$, $B \in [-1.16, -0.75]$, and $C \in [2.2, 3.78]$
 - D. $A \in [2, 3]$, $B \in [0.71, 1.27]$, and $C \in [-3.09, -2.29]$
 - E. $A \in [3, 7.5]$, $B \in [-2.48, -1.3]$, and $C \in [5.28, 6.98]$
-

3. Solve the equation below. Then, choose the interval that contains the

solution.

$$-7(-2x + 18) = -16(11x + 13)$$

- A. $x \in [-0.49, -0.38]$
- B. $x \in [1.24, 2.02]$
- C. $x \in [-2.48, -1.86]$
- D. $x \in [-1.87, -1.67]$
- E. There are no real solutions.

-
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 .

$$(11, -9) \text{ and } (-4, -7)$$

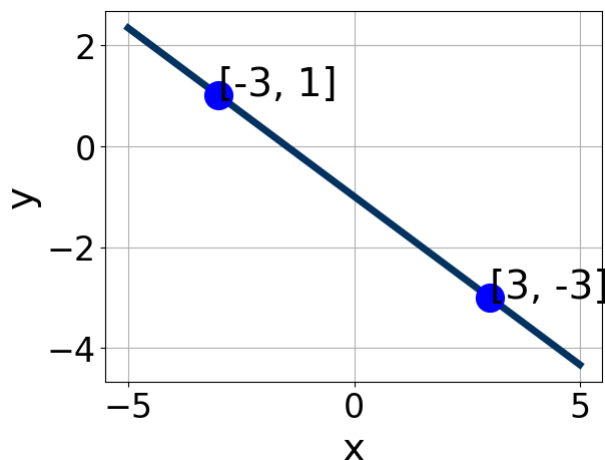
- A. $m \in [0.11, 0.18]$ $b \in [-6.9, -4.1]$
- B. $m \in [-0.42, -0.11]$ $b \in [-9.3, -7]$
- C. $m \in [-0.42, -0.11]$ $b \in [6.7, 10.9]$
- D. $m \in [-0.42, -0.11]$ $b \in [-5.9, -2.1]$
- E. $m \in [-0.42, -0.11]$ $b \in [-21.3, -18.8]$

-
5. 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 .

$$(8, 11) \text{ and } (10, 5)$$

- A. $m \in [-5, 0]$ $b \in [-9, -2]$
- B. $m \in [-5, 0]$ $b \in [1, 6]$
- C. $m \in [-5, 0]$ $b \in [32, 38]$
- D. $m \in [-5, 0]$ $b \in [-40, -34]$
- E. $m \in [-2, 4]$ $b \in [-33, -20]$

6. 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. $A \in [-2.04, -1.15]$, $B \in [-4.03, -1.05]$, and $C \in [2.14, 3.26]$
B. $A \in [0.53, 0.76]$, $B \in [0.64, 2.57]$, and $C \in [-2.16, 0.81]$
C. $A \in [0.53, 0.76]$, $B \in [-2.59, 0.11]$, and $C \in [-0.25, 1.21]$
D. $A \in [1.93, 2.25]$, $B \in [2.82, 3.97]$, and $C \in [-3.64, -1.96]$
E. $A \in [1.93, 2.25]$, $B \in [-4.03, -1.05]$, and $C \in [2.14, 3.26]$
-

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

$$-6(-19x + 11) = -18(2x - 9)$$

- A. $x \in [1.46, 2.04]$
B. $x \in [-0.88, -0.5]$
C. $x \in [0.12, 1.48]$
D. $x \in [-1.61, -0.72]$
E. There are no real solutions.
-

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 $3x - 7y = 12$ and passing through the point $(10, 5)$.

- A. $m \in [-0.87, 0.16]$ $b \in [28.33, 32.33]$
- B. $m \in [-2.67, -2.15]$ $b \in [28.33, 32.33]$
- C. $m \in [2.33, 2.75]$ $b \in [-21.33, -17.33]$
- D. $m \in [-2.67, -2.15]$ $b \in [-31.33, -26.33]$
- E. $m \in [-2.67, -2.15]$ $b \in [-5, -3]$

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

$$\frac{-4x + 7}{4} - \frac{7x - 6}{5} = \frac{-9x - 5}{2}$$

- A. $x \in [0.5, 3.1]$
- B. $x \in [-3.6, -1.8]$
- C. $x \in [-9.1, -8.2]$
- D. $x \in [-2.4, -0.6]$
- E. There are no real solutions.

-
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 $8x + 3y = 4$ and passing through the point $(-2, 8)$.

- A. $m \in [2.4, 5]$ $b \in [7.77, 8.99]$
- B. $m \in [0.2, 0.5]$ $b \in [7.77, 8.99]$
- C. $m \in [0.2, 0.5]$ $b \in [9.84, 10.32]$
- D. $m \in [-1, 0.2]$ $b \in [6.63, 7.91]$
- E. $m \in [0.2, 0.5]$ $b \in [-11.7, -8.1]$