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.

$$(4,10)$$
 and $(-4,-6)$

- A. $m \in [1, 4]$ $b \in [-3, -1]$
- B. $m \in [-5, 1]$ $b \in [-18, -11]$
- C. $m \in [1, 4]$ $b \in [3, 10]$
- D. $m \in [1, 4]$ $b \in [-3, -1]$
- E. $m \in [1, 4]$ $b \in [0, 3]$
- 2. Solve the linear equation below. Then, choose the interval that contains the solution.

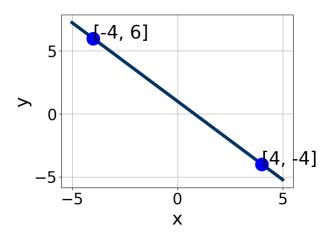
$$\frac{7x+8}{2} - \frac{6x-9}{7} = \frac{7x+8}{6}$$

- A. $x \in [-6.8, -5.1]$
- B. $x \in [-3.4, -2]$
- C. $x \in [-1, -0.7]$
- D. $x \in [0.6, 2.1]$
- E. There are no real solutions.
- 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.

$$(-10, 10)$$
 and $(-3, -8)$

- A. $m \in [-4.57, -1.57]$ $b \in [-22.71, -10.71]$
- B. $m \in [-4.57, -1.57]$ $b \in [17, 24]$
- C. $m \in [-4.57, -1.57]$ $b \in [-6, -1]$
- D. $m \in [-4.57, -1.57]$ $b \in [13.71, 17.71]$
- E. $m \in [1.57, 4.57]$ $b \in [-1.29, 1.71]$

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. $A \in [-0.1, 2.2], B \in [-0.31, 1.03], \text{ and } C \in [0.72, 1.47]$
- B. $A \in [4.4, 8.4], B \in [3.89, 4.28], \text{ and } C \in [3.8, 5.66]$
- C. $A \in [-0.1, 2.2], B \in [-1.84, -0.09], \text{ and } C \in [-2.35, -0.65]$
- D. $A \in [4.4, 8.4], B \in [-5.04, -3.95], \text{ and } C \in [-4.46, -3.92]$
- E. $A \in [-6.1, -4.8], B \in [-5.04, -3.95], \text{ and } C \in [-4.46, -3.92]$
- 5. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(4x+3) = -16(-5x+7)$$

- A. $x \in [0.45, 0.73]$
- B. $x \in [-1.65, -0.85]$
- C. $x \in [0.9, 1.17]$
- D. $x \in [3.58, 4.2]$
- E. There are no real solutions.
- 6. Solve the linear equation below. Then, choose the interval that contains

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the solution.

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

A.
$$x \in [13.27, 18.27]$$

B.
$$x \in [-10.18, -6.18]$$

C.
$$x \in [-3.54, 0.46]$$

D.
$$x \in [3.55, 8.55]$$

- E. There are no real solutions.
- 7. Solve the equation below. Then, choose the interval that contains the solution.

$$-8(-7x - 17) = -3(4x - 6)$$

A.
$$x \in [-4.6, -2.7]$$

B.
$$x \in [1.9, 2.5]$$

C.
$$x \in [-3.2, -2.1]$$

D.
$$x \in [-2.1, -0.8]$$

- 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.

Parallel to 3x + 8y = 3 and passing through the point (10, -3).

A.
$$m \in [0.3, 1.6]$$
 $b \in [-10.2, -5.8]$

B.
$$m \in [-5.1, -2.1]$$
 $b \in [0.2, 1.2]$

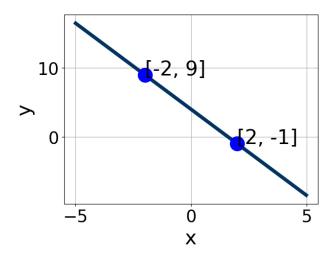
C.
$$m \in [-1.7, -0.2]$$
 $b \in [0.2, 1.2]$

D.
$$m \in [-1.7, -0.2]$$
 $b \in [-1.4, 0.6]$

E.
$$m \in [-1.7, -0.2]$$
 $b \in [-14, -11.7]$

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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. $A \in [0.5, 3.5], B \in [-0.4, 1.7], \text{ and } C \in [3.3, 6.7]$
- B. $A \in [0.5, 3.5], B \in [-1.59, -0.03], \text{ and } C \in [-5.7, -2.7]$
- C. $A \in [4, 10], B \in [1.92, 2.42], \text{ and } C \in [5.7, 8.1]$
- D. $A \in [4, 10], B \in [-2.26, -1.25], \text{ and } C \in [-10.8, -7.8]$
- E. $A \in [-11, -2], B \in [-2.26, -1.25], \text{ and } C \in [-10.8, -7.8]$
- 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 8x - 7y = 6 and passing through the point (-8, 4).

- A. $m \in [1.13, 1.43]$ $b \in [-14.14, -8.14]$
- B. $m \in [1.13, 1.43]$ $b \in [13.14, 17.14]$
- C. $m \in [1.13, 1.43]$ $b \in [8, 13]$
- D. $m \in [-1.28, -0.88]$ $b \in [-7.14, -3.14]$
- E. $m \in [0.67, 1.1]$ $b \in [13.14, 17.14]$

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