Progress Quiz 4 Version C

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 6x - 7y = 4 and passing through the point (2,8).

A.
$$m \in [0.8, 0.88]$$
 $b \in [6.25, 6.43]$

B.
$$m \in [0.8, 0.88]$$
 $b \in [-7.04, -6.05]$

C.
$$m \in [-1.62, -0.62]$$
 $b \in [9.25, 10.45]$

D.
$$m \in [0.8, 0.88]$$
 $b \in [5.56, 6.22]$

E.
$$m \in [1.05, 1.62]$$
 $b \in [6.25, 6.43]$

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.

$$(10, -8)$$
 and $(-6, -3)$

A.
$$m \in [-0.61, -0.24]$$
 $b \in [-19.8, -17.4]$

B.
$$m \in [-0.3, 0.37]$$
 $b \in [-2, 2.5]$

C.
$$m \in [-0.61, -0.24]$$
 $b \in [4.2, 5.5]$

D.
$$m \in [-0.61, -0.24]$$
 $b \in [-5.7, -4.6]$

E.
$$m \in [-0.61, -0.24]$$
 $b \in [-0.2, 4]$

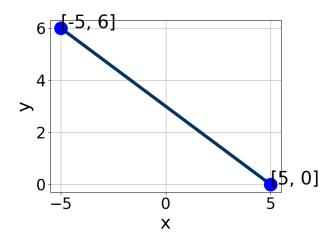
3. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.

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- A. $A \in [0.9, 4.1], B \in [4.8, 5.1], \text{ and } C \in [14, 17]$
- B. $A \in [-4.4, -1.8], B \in [-5.2, -3.5], \text{ and } C \in [-15, -9]$
- C. $A \in [-0.8, 1.3], B \in [-1.6, -0.7], \text{ and } C \in [-6, -2]$
- D. $A \in [0.9, 4.1], B \in [-5.2, -3.5], \text{ and } C \in [-15, -9]$
- E. $A \in [-0.8, 1.3], B \in [-0.3, 1.8], \text{ and } C \in [2, 5]$
- 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.

$$(-11,9)$$
 and $(-3,-2)$

- A. $m \in [-3.4, -0.1]$ $b \in [-0.7, 1.6]$
- B. $m \in [-0.9, 4.7]$ $b \in [1.4, 4.4]$
- C. $m \in [-3.4, -0.1]$ $b \in [19.1, 21.1]$
- D. $m \in [-3.4, -0.1]$ $b \in [-6.7, -2.1]$
- E. $m \in [-3.4, -0.1]$ $b \in [6, 6.8]$
- 5. Solve the linear equation below. Then, choose the interval that contains the solution.

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

A. $x \in [-1.28, 0.5]$

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B.
$$x \in [-3.11, -1.84]$$

C.
$$x \in [-13.75, -13.38]$$

D.
$$x \in [-2.79, -1.42]$$

E. There are no real solutions.

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

$$-4(12x - 17) = -6(10x + 9)$$

A.
$$x \in [-10.5, -9.85]$$

B.
$$x \in [-0.46, 0.83]$$

C.
$$x \in [0.22, 1.43]$$

D.
$$x \in [-1.41, -0.59]$$

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.

Perpendicular to 4x + 9y = 4 and passing through the point (-10, 9).

A.
$$m \in [1.7, 3.5]$$
 $b \in [31.5, 33.5]$

B.
$$m \in [1.7, 3.5]$$
 $b \in [18, 25]$

C.
$$m \in [-3, -0.9]$$
 $b \in [-17.5, -10.5]$

D.
$$m \in [1.7, 3.5]$$
 $b \in [-34.5, -29.5]$

E.
$$m \in [-1.4, 1.1]$$
 $b \in [31.5, 33.5]$

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

$$-11(-10x + 14) = -18(5x + 2)$$

A.
$$x \in [9.41, 9.62]$$

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B.
$$x \in [0.92, 1.59]$$

C.
$$x \in [-1.27, -0.82]$$

D.
$$x \in [0.59, 0.71]$$

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

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

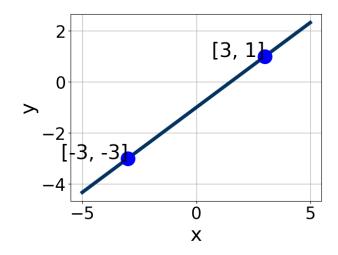
A.
$$x \in [418, 422]$$

B.
$$x \in [-1.63, 2.37]$$

C.
$$x \in [122, 126]$$

D.
$$x \in [24, 27]$$

- E. There are no real solutions.
- 10. 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.
$$A \in [-2.8, -1.8], B \in [2.85, 3.32], \text{ and } C \in [-6.2, -2.5]$$

B.
$$A \in [-0.4, 5], B \in [-3.88, -2.51], \text{ and } C \in [1.7, 5.3]$$

C.
$$A \in [-0.4, 5], B \in [2.85, 3.32], \text{ and } C \in [-6.2, -2.5]$$

- D. $A \in [-1.8, 1.6], B \in [0.1, 1.66], \text{ and } C \in [-1.6, -0.2]$
- E. $A \in [-1.8, 1.6], B \in [-2.63, 0.26], and C \in [-0.9, 2.1]$

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