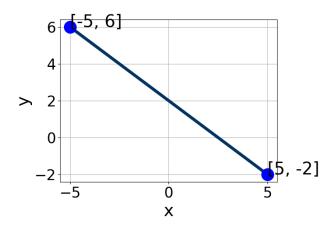
Progress Quiz 1 Version A

1. 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. $A \in [-9, 0], B \in [-5.4, -3.2], \text{ and } C \in [-15, -7]$
- B. $A \in [4, 5], B \in [1.4, 8.3], \text{ and } C \in [9, 13]$
- C. $A \in [-0.2, 1.8], B \in [-4.4, 0.8], \text{ and } C \in [-6, 0]$
- D. $A \in [-0.2, 1.8], B \in [0.7, 2.1], \text{ and } C \in [1, 3]$
- E. $A \in [4, 5]$, $B \in [-5.4, -3.2]$, and $C \in [-15, -7]$

2. 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 6x - 7y = 12 and passing through the point (-6, 9).

- A. $m \in [-1.32, -1.04]$ $b \in [-2.34, -1.24]$
- B. $m \in [-1.32, -1.04]$ $b \in [1.63, 2.84]$
- C. $m \in [-1.32, -1.04]$ $b \in [14.04, 15.25]$
- D. $m \in [-1, -0.63]$ $b \in [1.63, 2.84]$
- E. $m \in [0.65, 1.44]$ $b \in [15.67, 16.48]$

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

1269-8776 Fall 2020

Progress Quiz 1

contain m and b.

$$(4,10)$$
 and $(-9,-2)$

A.
$$m \in [-2.4, -0.29]$$
 $b \in [-10.39, -9.79]$

B.
$$m \in [0.31, 1.9]$$
 $b \in [5.78, 6.11]$

C.
$$m \in [0.31, 1.9]$$
 $b \in [6.61, 7.18]$

D.
$$m \in [0.31, 1.9]$$
 $b \in [6.15, 6.33]$

E.
$$m \in [0.31, 1.9]$$
 $b \in [-6.81, -6.26]$

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

$$-11(-8x+9) = -6(-12x-18)$$

A.
$$x \in [-0.2, -0.09]$$

B.
$$x \in [-7.6, -7.2]$$

C.
$$x \in [0.75, 1.29]$$

D.
$$x \in [-0.82, -0.56]$$

E. There are no real solutions.

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

$$\frac{-8x+9}{3} - \frac{-6x+9}{5} = \frac{-9x-9}{8}$$

A.
$$x \in [4.8, 10.8]$$

B.
$$x \in [-2.33, 4.67]$$

C.
$$x \in [17.34, 23.34]$$

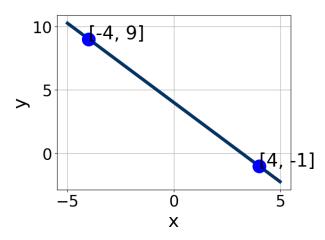
D.
$$x \in [23.34, 29.34]$$

E. There are no real solutions.

1269-8776 Fall 2020

Progress Quiz 1 Version A

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. $A \in [0.5, 1.4], B \in [0.64, 1.2], \text{ and } C \in [1, 14]$
- B. $A \in [0.5, 1.4], B \in [-1.53, -0.68], \text{ and } C \in [-5, 3]$
- C. $A \in [3.2, 5.7], B \in [3.92, 4.65], \text{ and } C \in [12, 18]$
- D. $A \in [-5.1, -1.3], B \in [-4.91, -3.42], \text{ and } C \in [-16, -12]$
- E. $A \in [3.2, 5.7], B \in [-4.91, -3.42], \text{ and } C \in [-16, -12]$

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 9x + 4y = 14 and passing through the point (9, 5).

- A. $m \in [0.19, 1.41]$ $b \in [-5.5, -2.8]$
- B. $m \in [0.19, 1.41]$ $b \in [-0.1, 1.5]$
- C. $m \in [0.19, 1.41]$ $b \in [-2.8, 0.3]$
- D. $m \in [-1.39, 0.09]$ $b \in [7.4, 9.5]$
- E. $m \in [1.21, 2.78]$ $b \in [-0.1, 1.5]$

8. 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

1269-8776 Fall 2020

Progress Quiz 1

contain m and b.

$$(-3, -7)$$
 and $(4, 4)$

A.
$$m \in [1.57, 4.57]$$
 $b \in [-2.1, 0.1]$

B.
$$m \in [1.57, 4.57]$$
 $b \in [-2.4, -1.7]$

C.
$$m \in [1.57, 4.57]$$
 $b \in [0.6, 2.6]$

D.
$$m \in [1.57, 4.57]$$
 $b \in [-6, -3.8]$

E.
$$m \in [-5.57, 1.43]$$
 $b \in [8.9, 11.9]$

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

$$-12(10x+5) = -3(19x-14)$$

A.
$$x \in [-54.4, -52]$$

B.
$$x \in [-26.7, -24.5]$$

C.
$$x \in [0.6, 2.3]$$

D.
$$x \in [-3.1, -1.3]$$

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

$$\frac{-3x+3}{5} - \frac{9x+5}{8} = \frac{-8x-5}{6}$$

A.
$$x \in [3.7, 6.1]$$

B.
$$x \in [-0.9, 1]$$

C.
$$x \in [6.8, 8.4]$$

D.
$$x \in [1, 2.9]$$

E. There are no real solutions.