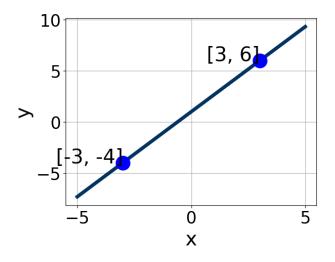
1. Write the equation of the line in the graph below in Standard form Ax + By = C. Then, choose the intervals that contain A, B, and C.



- A. $A \in [-4.67, 2.33], B \in [-1.4, -0.58], \text{ and } C \in [-1.82, -0.53]$
- B. $A \in [5, 9], B \in [-3.46, -2.21], \text{ and } C \in [-3.33, -2.68]$
- C. $A \in [5, 9], B \in [1.87, 4.09], \text{ and } C \in [1.53, 3.37]$
- D. $A \in [-6, -4], B \in [1.87, 4.09], \text{ and } C \in [1.53, 3.37]$
- E. $A \in [-4.67, 2.33], B \in [0.29, 2.29], \text{ and } C \in [-0.08, 1.04]$
- 2. Solve the equation below. Then, choose the interval that contains the solution.

$$-11(-3x+8) = -16(2x-9)$$

- A. $x \in [-0.2, 1.7]$
- B. $x \in [-57, -54.4]$
- C. $x \in [2.2, 3.9]$
- D. $x \in [-1.7, 0.5]$
- E. There are no real solutions.
- 3. Solve the linear equation below. Then, choose the interval that contains

4553-3922 Fall 2020

the solution.

$$\frac{-9x-6}{5} - \frac{-3x-7}{8} = \frac{-9x+7}{6}$$

- A. $x \in [18.89, 21.89]$
- B. $x \in [42.22, 46.22]$
- C. $x \in [-2.5, 1.5]$
- D. $x \in [80, 83]$
- E. There are no real solutions.
- 4. 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 7x-6y=15 and passing through the point (-6,-5).

- A. $m \in [-1.11, -0.76]$ $b \in [0.98, 1.65]$
- B. $m \in [-1.11, -0.76]$ $b \in [9.36, 11.16]$
- C. $m \in [-1.37, -1.02]$ $b \in [-11.03, -9.97]$
- D. $m \in [-1.11, -0.76]$ $b \in [-11.03, -9.97]$
- E. $m \in [0.68, 1.49]$ $b \in [-0.81, 0.79]$
- 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.

$$(6, -4)$$
 and $(-2, -7)$

- A. $m \in [-0.2, 3.8]$ $b \in [5.61, 7.1]$
- B. $m \in [-0.2, 3.8]$ $b \in [-6.9, -5.43]$
- C. $m \in [-0.2, 3.8]$ $b \in [-11.84, -9.25]$
- D. $m \in [-0.2, 3.8]$ $b \in [-5.43, -4.92]$
- E. $m \in [-1, 0.2]$ $b \in [-8.76, -7.56]$

4553-3922 Fall 2020

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

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

- A. $x \in [5.89, 9.89]$
- B. $x \in [-2.46, 4.54]$
- C. $x \in [30, 32]$
- D. $x \in [-6.61, -3.61]$
- 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 6x - 7y = 6 and passing through the point (5,3).

- A. $m \in [0.74, 0.88]$ $b \in [-1.3, 0]$
- B. $m \in [-1.19, -0.74]$ $b \in [5.4, 8.3]$
- C. $m \in [0.74, 0.88]$ $b \in [-2.6, -1.8]$
- D. $m \in [0.74, 0.88]$ $b \in [0.4, 4.4]$
- E. $m \in [0.86, 1.32]$ $b \in [-1.3, 0]$
- 8. Solve the equation below. Then, choose the interval that contains the solution.

$$-10(-8x+19) = -3(7x+5)$$

- A. $x \in [1.64, 1.84]$
- B. $x \in [1.92, 2.14]$
- C. $x \in [-2.24, -1.98]$
- D. $x \in [3.28, 3.51]$
- 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.

$$(5,7)$$
 and $(6,5)$

A.
$$m \in [-4, 1]$$
 $b \in [0.6, 2.5]$

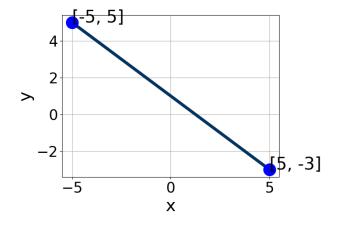
B.
$$m \in [-4, 1]$$
 $b \in [-18.7, -16]$

C.
$$m \in [-4, 1]$$
 $b \in [-3.3, 0.8]$

D.
$$m \in [-1, 10]$$
 $b \in [-7.8, -5.1]$

E.
$$m \in [-4, 1]$$
 $b \in [16.7, 19.1]$

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.
$$A \in [-5, -2], B \in [-5.49, -3.73], \text{ and } C \in [-5.7, -2.9]$$

B.
$$A \in [2, 6], B \in [-5.49, -3.73], \text{ and } C \in [-5.7, -2.9]$$

C.
$$A \in [-3.2, 3.8], B \in [-1.53, 0.74], \text{ and } C \in [-4.4, 0.8]$$

D.
$$A \in [-3.2, 3.8], B \in [0.53, 3.2], \text{ and } C \in [0.6, 1.1]$$

E.
$$A \in [2, 6], B \in [3.33, 5.56], \text{ and } C \in [3.6, 6.5]$$

4553-3922 Fall 2020