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.

$$(5,-7)$$
 and $(2,-9)$

A.
$$m \in [-2, 5]$$
 and $b \in [-11.48, -10.88]$

B.
$$m \in [-1, 5]$$
 and $b \in [-12.24, -11.61]$

C.
$$m \in [0, 4]$$
 and $b \in [-10.9, -10.2]$

D.
$$m \in [-2, 0]$$
 and $b \in [-8.03, -7.18]$

E.
$$m \in [-2, 5]$$
 and $b \in [9.49, 10.35]$

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.

Parallel to 9x + 5y = 14 and passing through the point (-9, 8).

A.
$$m \in [-3, -1]$$
 and $b \in [6, 10]$

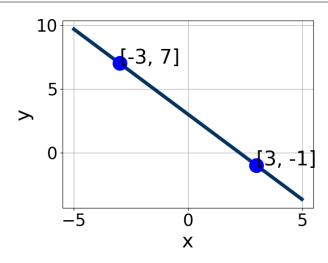
B.
$$m \in [-2.6, -1.7]$$
 and $b \in [-11, -7]$

C.
$$m \in [1, 2.9]$$
 and $b \in [22, 26]$

D.
$$m \in [-5, 0]$$
 and $b \in [-2, 1]$

E.
$$m \in [-1.4, 0.3]$$
 and $b \in [-10, -6]$

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.



- A. $A \in [-0.22, 1.74], B \in [-1.68, -0.23], \text{ and } C \in [-13.4, -9.8]$
- B. $A \in [-4.82, -3.74], B \in [-3.81, -2.5], \text{ and } C \in [-9.9, -7]$
- C. $A \in [2.18, 3.38], B \in [-4.07, -3.11], and <math>C \in [-13.4, -9.8]$
- D. $A \in [3.47, 5.34], B \in [2.58, 3.1], \text{ and } C \in [8.1, 10.8]$
- E. $A \in [-0.22, 1.74], B \in [0.99, 2.44], \text{ and } C \in [-1, 6.6]$
- 4. Solve the equation below. Then, choose the interval that contains the solution.

$$-13(12+3x) = -5(-14x+15)$$

- A. $x \in [-2.82, -2.47]$
- B. $x \in [-2.29, -1.83]$
- C. $x \in [-1.14, -0.41]$
- D. $x \in [0.72, 1.34]$
- E. There are no Real solutions.
- 5. Solve the linear equation below. Then, choose the interval that contains the solution.

$$\frac{3x-5}{7} - \frac{-5x-4}{8} = \frac{9x+5}{2}$$

A.
$$x \in [-1.02, -0.17]$$

B.
$$x \in [-3.07, -2.05]$$

C.
$$x \in [-1.93, -1.37]$$

D.
$$x \in [-1.63, -0.96]$$

E. There are no Real solutions.