

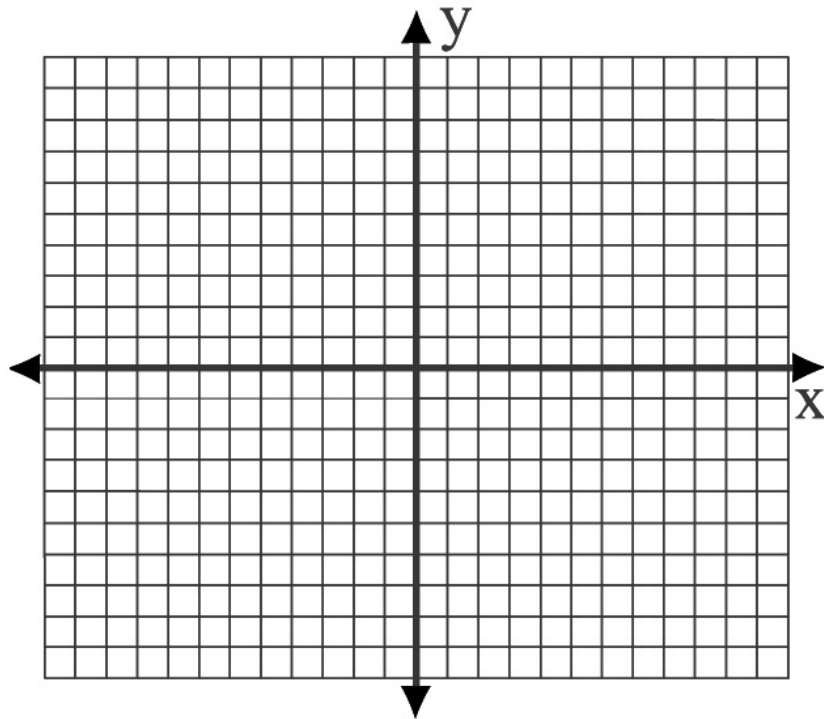
Graph and shade each system of linear inequalities.

1.

$$y > -2x + 6$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

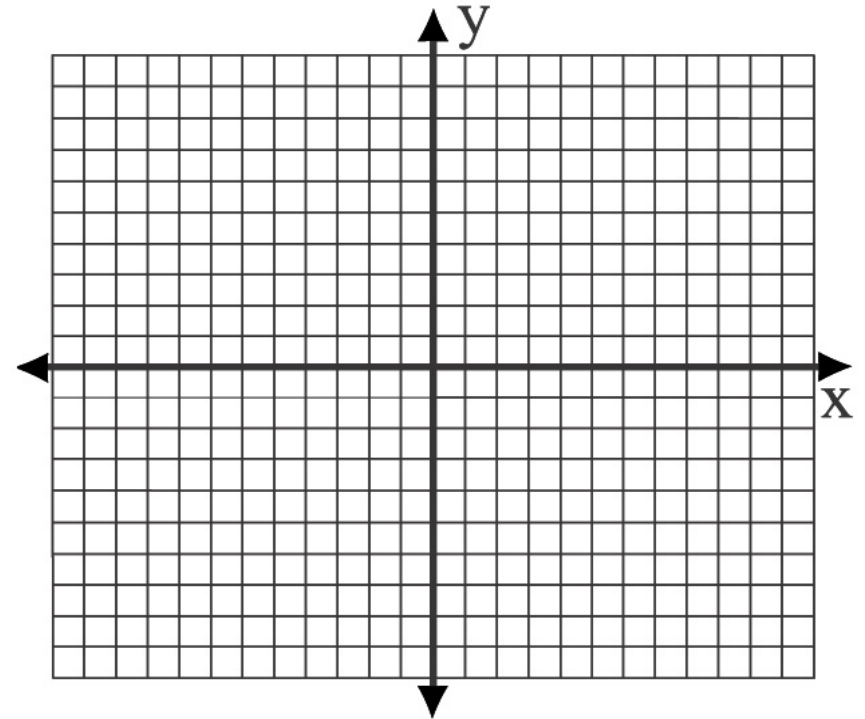


2.

$$y < x - 3$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$



$$y \leq \frac{1}{2}x - 8$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$y \geq -3x + 1$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

3.

$$y \geq 3x - 6$$

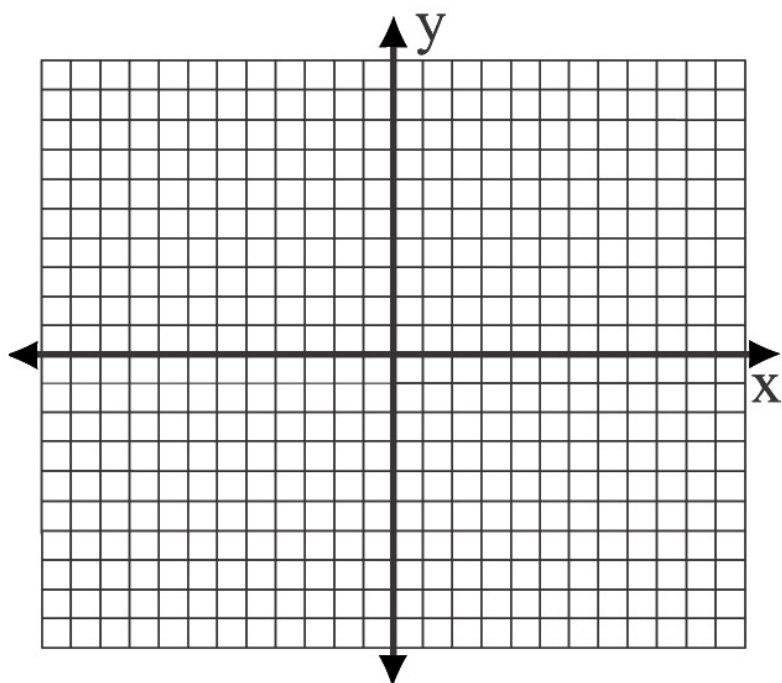
$$y < -x + 2$$

$$m = \underline{\hspace{2cm}}$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$



4.

$$y \leq (-3/4)x + 2$$

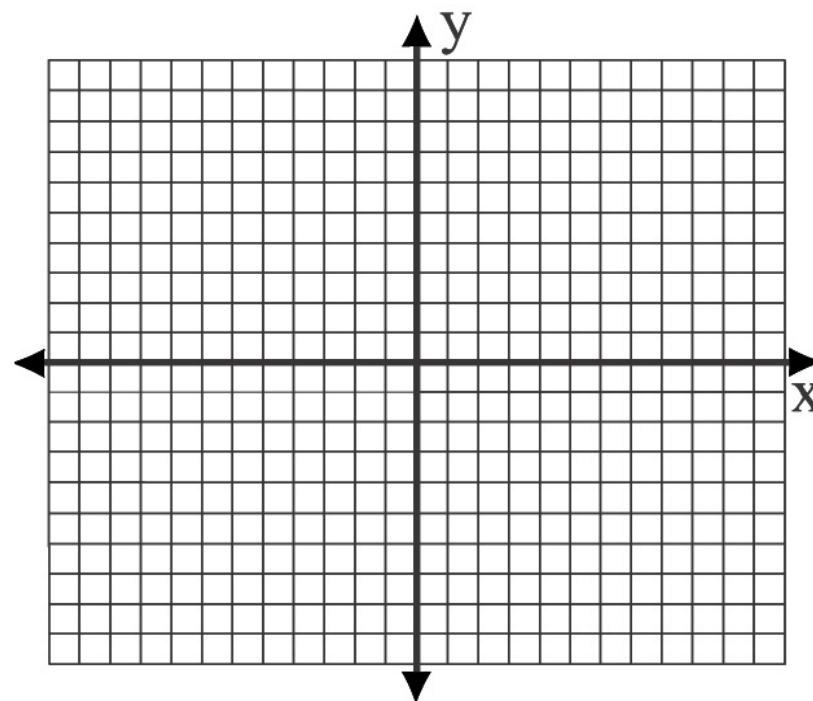
$$y > x + 1$$

$$m = \underline{\hspace{2cm}}$$

$$m = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$

$$b = \underline{\hspace{2cm}}$$



The following questions are based on the graphs of the four previous linear inequalities. Be sure you have checked your graphs with your graphing calculator before proceeding.

Circle each ordered pair that is a "solution" to the given systems of linear inequalities.

Question 1 $(0, 0)$ $(8, -2)$ $(-4, 4)$ $(1, 7)$ $(10, 5)$

Question 2. $(6, -10)$ $(-3, 0)$ $(-1, -10)$ $(9, -7)$ $(1, -4)$

Question 3. $(0,0)$ $(-7, 2)$ $(8, 1)$ $(2, 6)$ $(0, -10)$

Question 4. $(7, -2)$ $(-7, 2)$ $(-2, 8)$ $(-3, -7)$ $(- 8, - 3)$

5.

First Equation

$$12x - 24y < 48$$

Second Equation

$$-2x + 3y > -18$$

Equation

$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Equation

$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

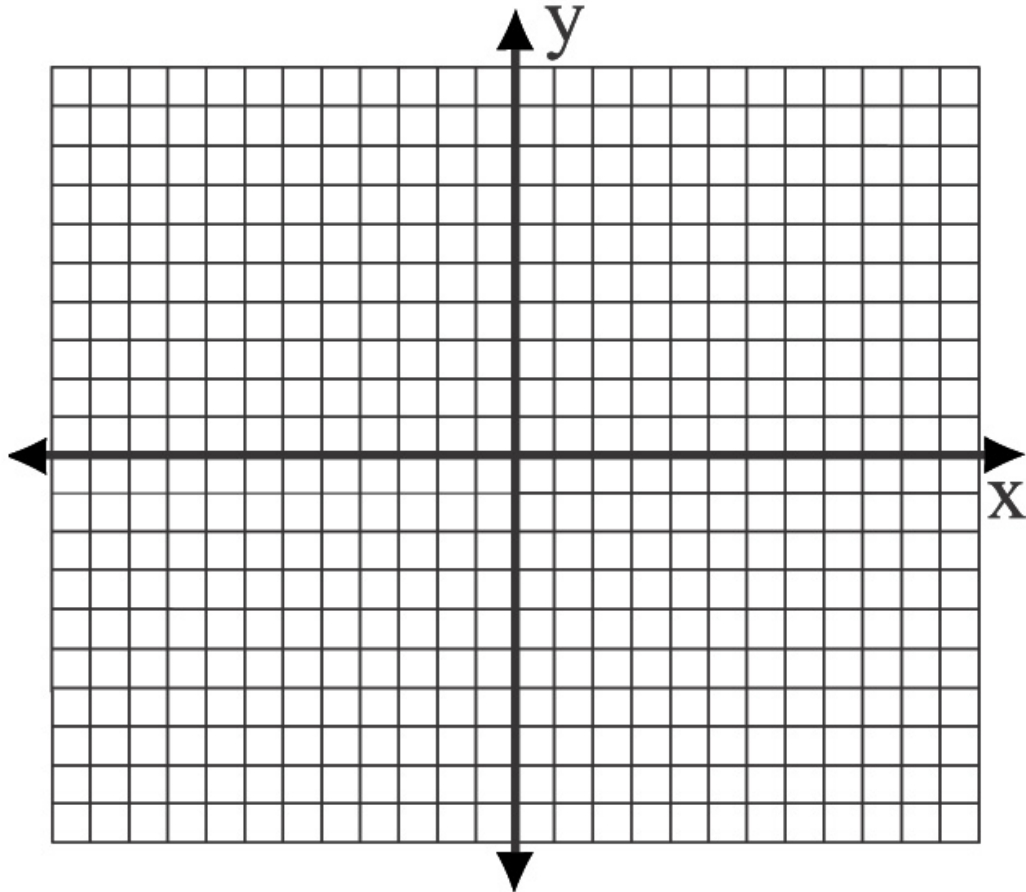
Write the following code letters in the appropriate sections of the completed graph.

F first inequality only

N neither inequality

S second inequality only

B both inequalities



6.

First Equation
 $3x + 2y < 12$

Second Equation
 $2x - 3y < -18$

Equation

m = _____ b = _____

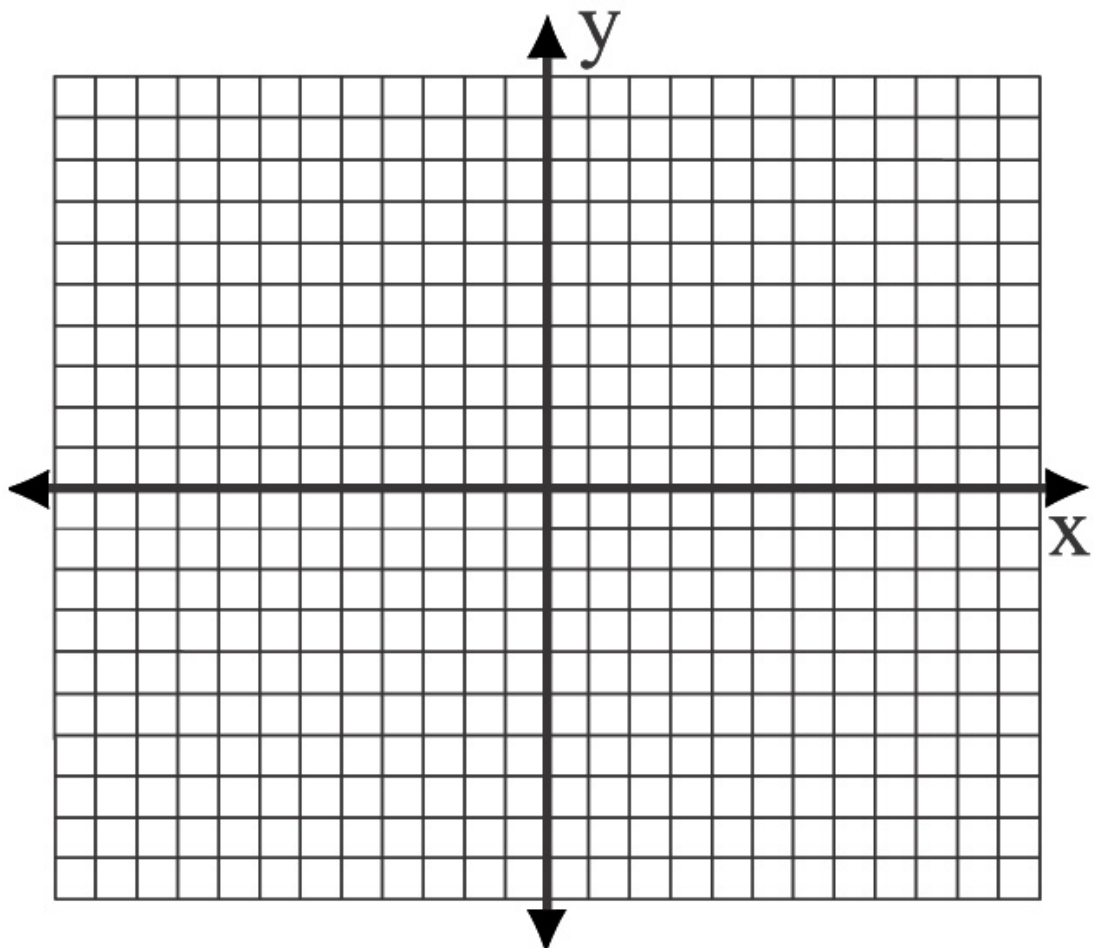
Equation

m = _____ b = _____

Write the following code letters in the appropriate sections of the completed graph.

F first inequality only
N neither inequality

S second inequality only
B both inequalities



7.

First Equation

$$-4x + 3y \geq -24$$

Second Equation

$$3x + 4y \geq 24$$

Equation

$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

Equation

$m = \underline{\hspace{2cm}}$ $b = \underline{\hspace{2cm}}$

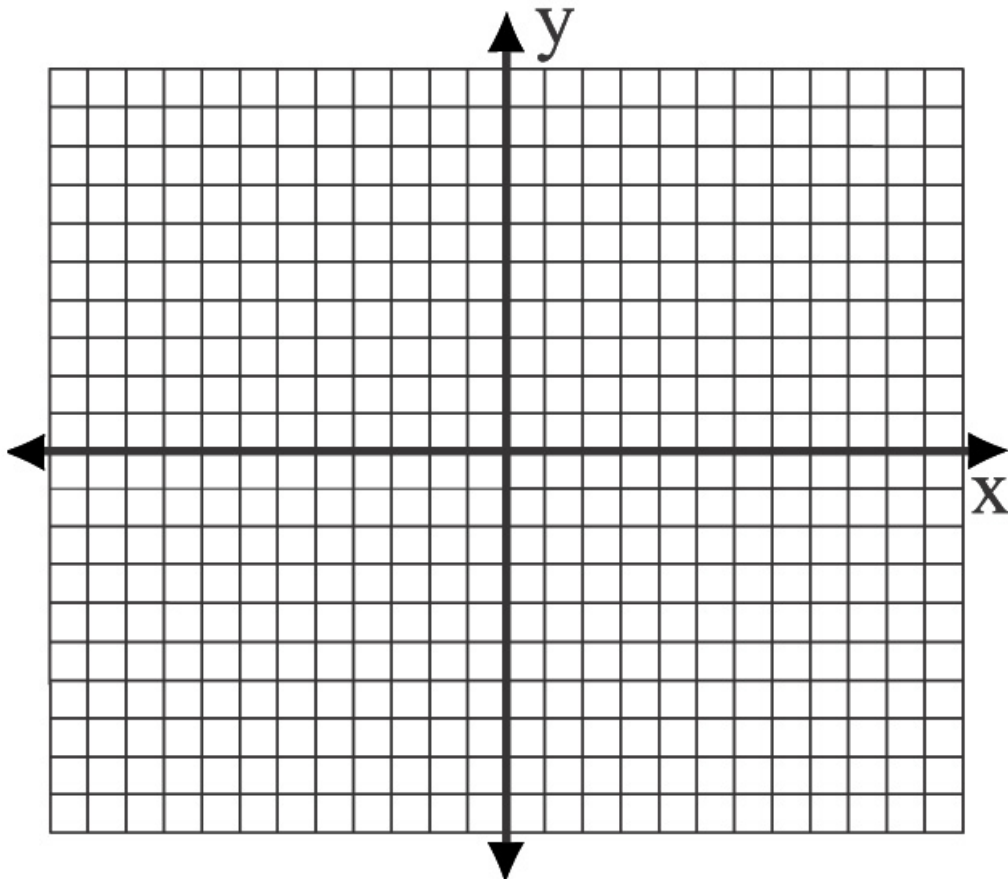
Write the following code letters in the appropriate sections of the completed graph.

F first inequality only

N neither inequality

S second inequality only

B both inequalities



8.

First Equation

$$y > -3$$

Second Equation

$$x > 1$$

Equation

$$m = \underline{\quad} \quad b = \underline{\quad}$$

Equation

$$m = \underline{\quad} \quad b = \underline{\quad}$$

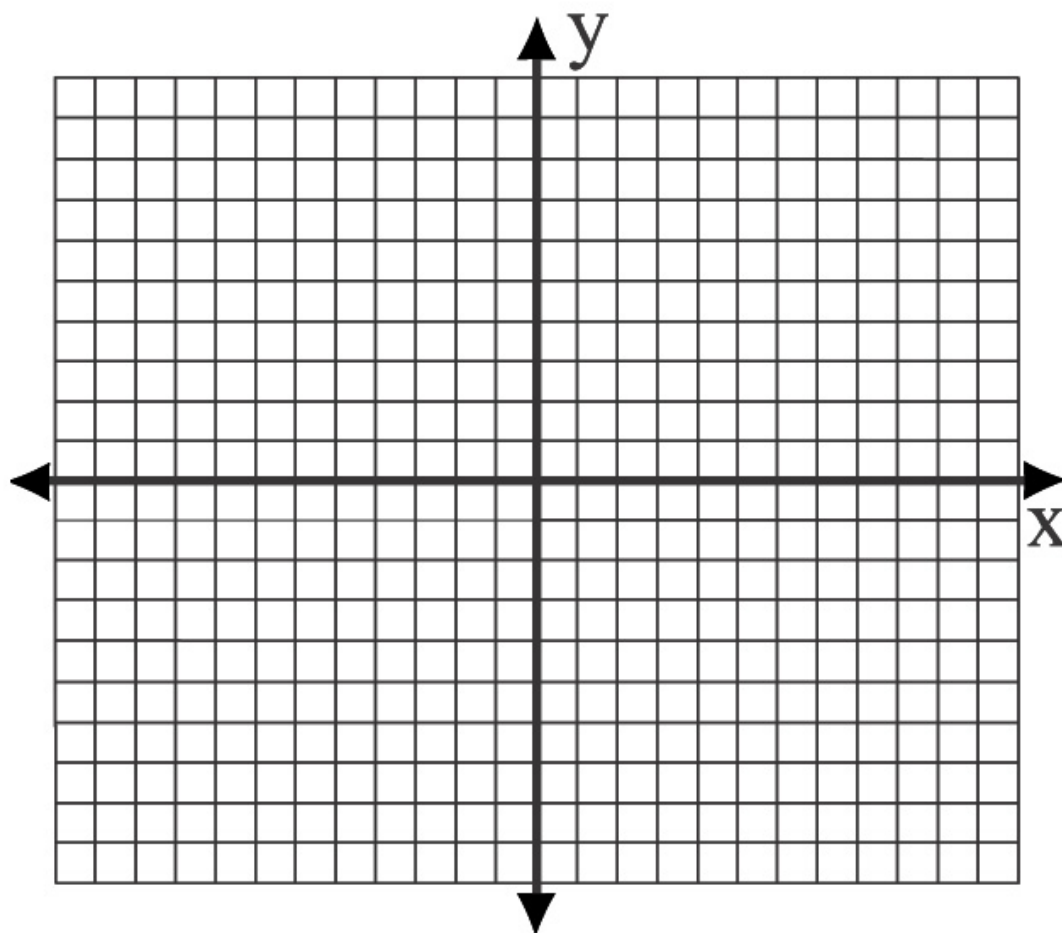
Write the following code letters in the appropriate sections of the completed graph.

F first inequality only

N neither inequality

S second inequality only

B both inequalities



9.

First Equation

$$5x - 2y \geq 10$$

Second Equation

$$-5x + 2y > 10$$

Equation

m = _____ b = _____

Equation

m = _____ b = _____

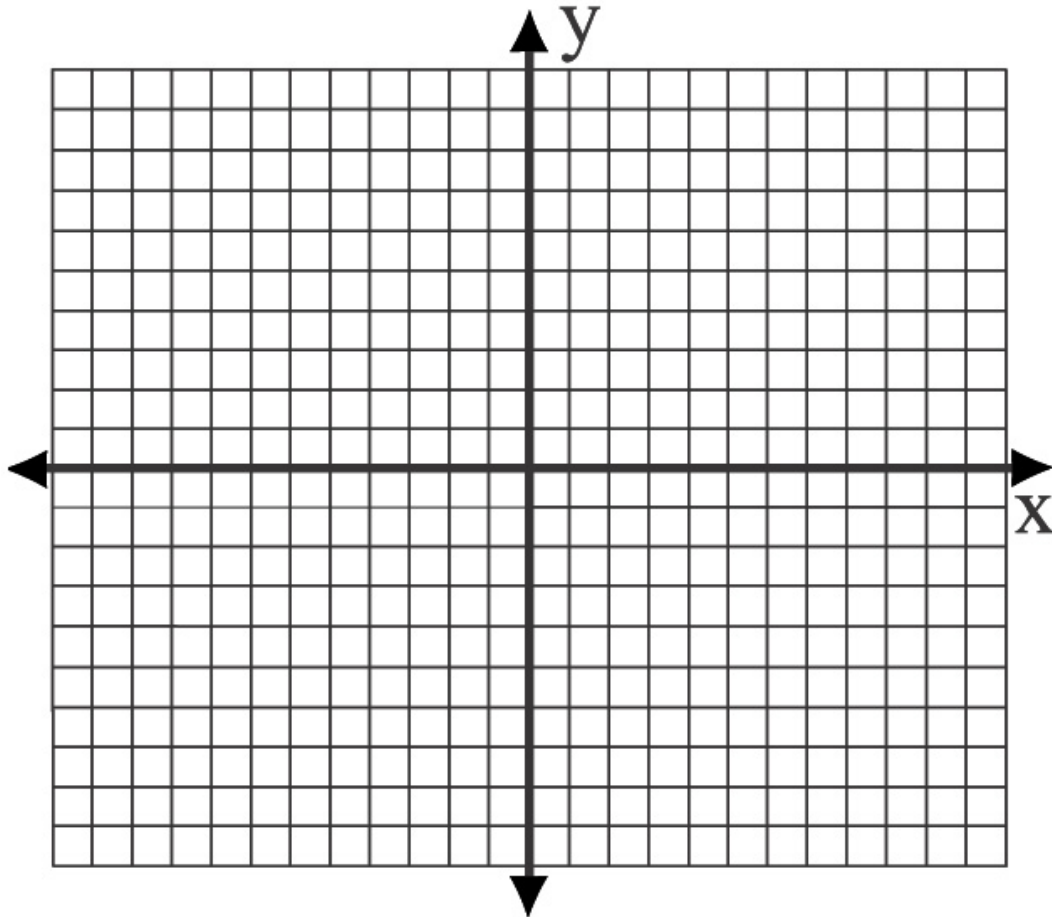
Write the following code letters in the appropriate sections of the completed graph.

F first inequality only

N neither inequality

S second inequality only

B both inequalities



10.

First Equation

$$12x - 6y < 48$$

Second Equation

$$-x - 3y > -6$$

Equation

$$m = \underline{\quad\quad} \quad b = \underline{\quad\quad}$$

Equation

$$m = \underline{\quad\quad} \quad b = \underline{\quad\quad}$$

Write the following code letters in the appropriate sections of the completed graph.

F first inequality only
N neither inequality

S second inequality only
B both inequalities

