

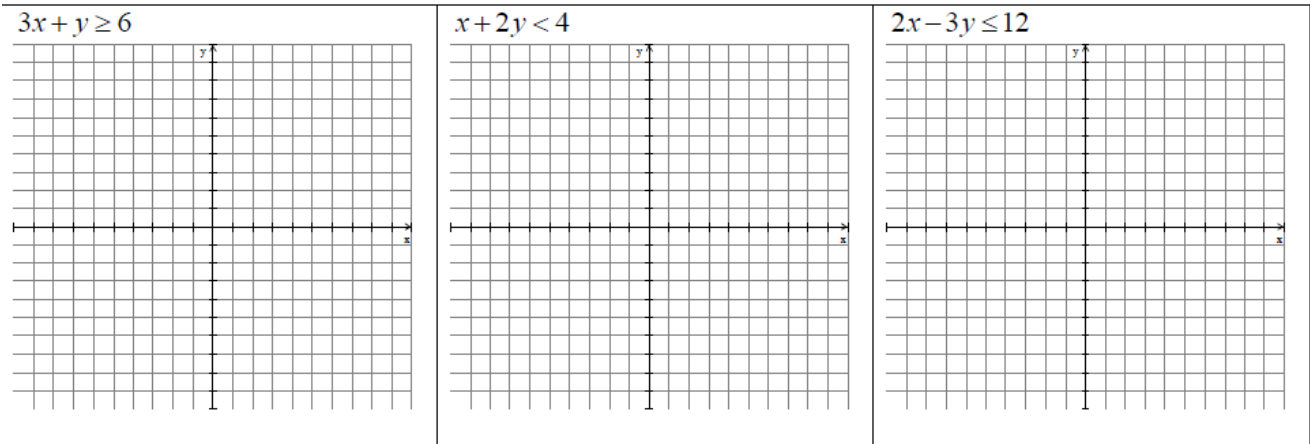
FM 11

Warm Up to 6.1

Name:

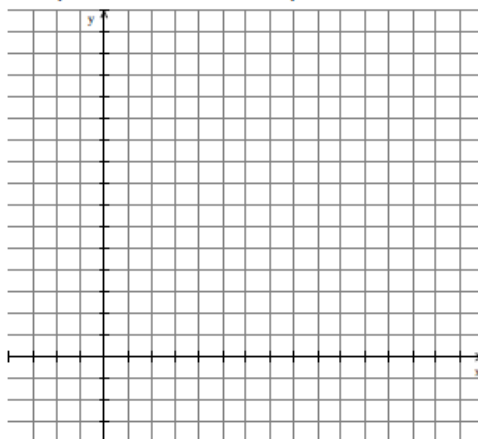
Feb. 11, 2020

1. Graph:



2. Frank and Joe sell lemonade. They buy lemons for \$.50 each and sugar costs them \$1 for 1kg. They have \$20 to spend on supplies.

- a. Give two combinations of lemons and sugar that would total \$20
- b. Represent this situation with an equation
- c. What is the domain (lemons) and range (sugar) for each?
- d. Is the solution set represented by the region above the line, below the line, or on the line itself?
- e. Is the line solid or dashed?
- f. Graph the relationship



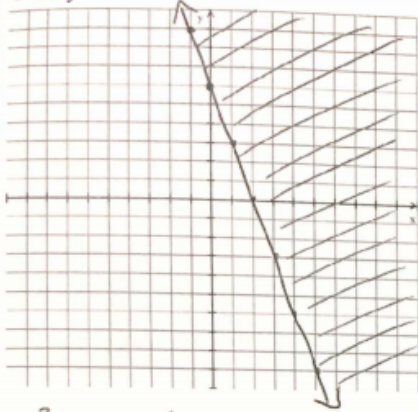
FM 11

Warm Up to 6.1

Name:

1. Graph:

$3x + y \geq 6$

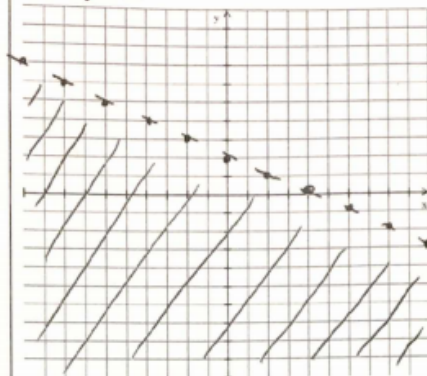


$$3x + y = 6$$

$$\begin{matrix} -3x & & -3x \\ y & = & -3x + 6 \\ y & = & -\frac{3}{1}x + 6 \end{matrix}$$

$y = -\frac{3}{1}x + 6$ y-intercept

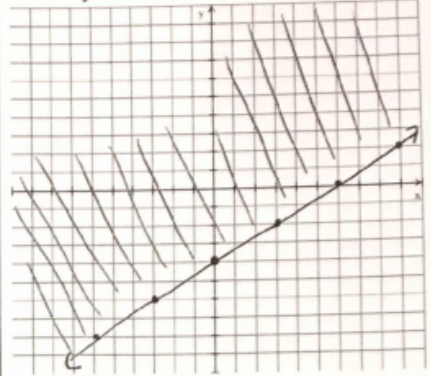
$x + 2y < 4$



$$x + 2y = 4$$

$$\begin{matrix} -x & & -x \\ 2y & = & -x + 4 \\ \frac{2y}{2} & = & \frac{-x}{2} + \frac{4}{2} \\ y & = & -\frac{x}{2} + 2 \end{matrix}$$

$2x - 3y \leq 12$



$$2x - 3y = 12$$

$$\begin{matrix} +3y & & +3y \\ 2x & = & 3y + 12 \\ -12 & & -12 \\ 2x - 12 & = & 3y \\ \frac{2}{3}x - 4 & = & y \end{matrix}$$

2. Frank and Joe sell lemonade. They buy lemons for \$.50 each and sugar costs them \$1 for 1kg. They have \$20 to spend on supplies.

- a. Give two combinations of lemons and sugar that would total \$20
 8 lemons & 16 kg sugar 30 lemons & 5 kg sugar

b. Represent this situation with an equation

$$.5x + 1y = 20$$

c. What is the domain (lemons) and range (sugar) for each?

0 to 40 lemons 0 to 20 kg sugar

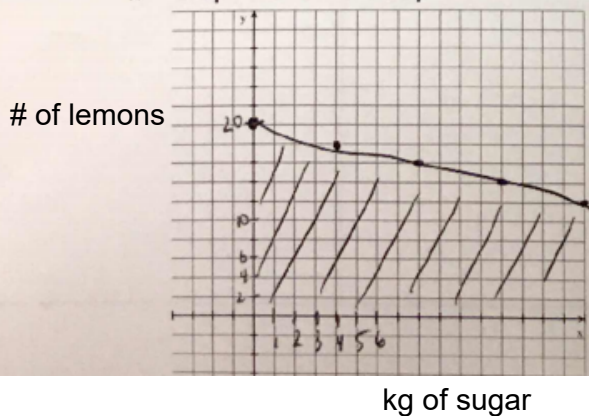
d. Is the solution set represented by the region above the line, below the line, or on the line itself?

Below or on

e. Is the line solid or dashed?

Solid

f. Graph the relationship



$$.5x + 1y = 20$$

$$1y = -\frac{1}{2}x + 20$$

Gr 11 RF1 Section 5.2 & 5.3 Assignment

/20

Name:

Assignment Due Wednesday**1. Page 225 # 1 & 2****2. Page 236: # 4bd, 7, 8****Quiz Friday (on first two assignments)****3. Word Problem: Show all work on a separate piece of graph paper.**

1. A banquet room is set up to seat, at most, 750 people. Each rectangular table seats 24 people, and each circular table seats 5 people.

a) Define the variables and write a linear inequality to represent the number of each type of table needed.

b) The organizers of the banquet would like to have as close to the same number of rectangular tables and circular tables as possible. What combination of tables could they use? Explain your choice using a graph.

4. Graphing: Show all work on this page or a separate piece of graph paper.**Sketch the solution to each system of inequalities.**

$$\begin{aligned} 1) \quad & y \leq -x - 2 \\ & y \geq -5x + 2 \end{aligned}$$

$$\begin{aligned} 2) \quad & y > -x - 2 \\ & y < -5x + 2 \end{aligned}$$