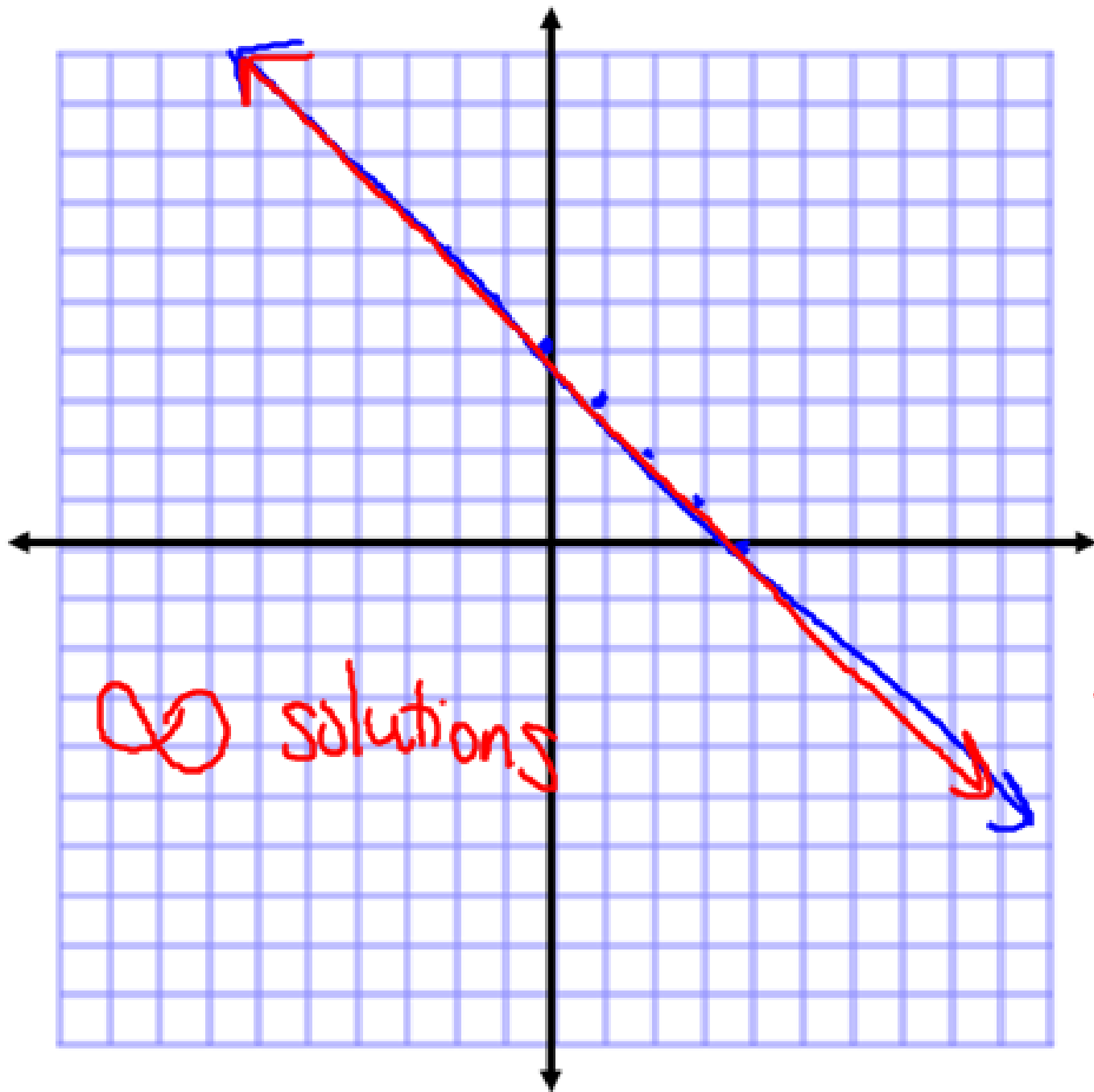


Warm-Up!!!!

Graph the following Systems

1. $x + y = 4$
 $3x + 3y = 12$

2. $x > -1$
 $y \leq -3$



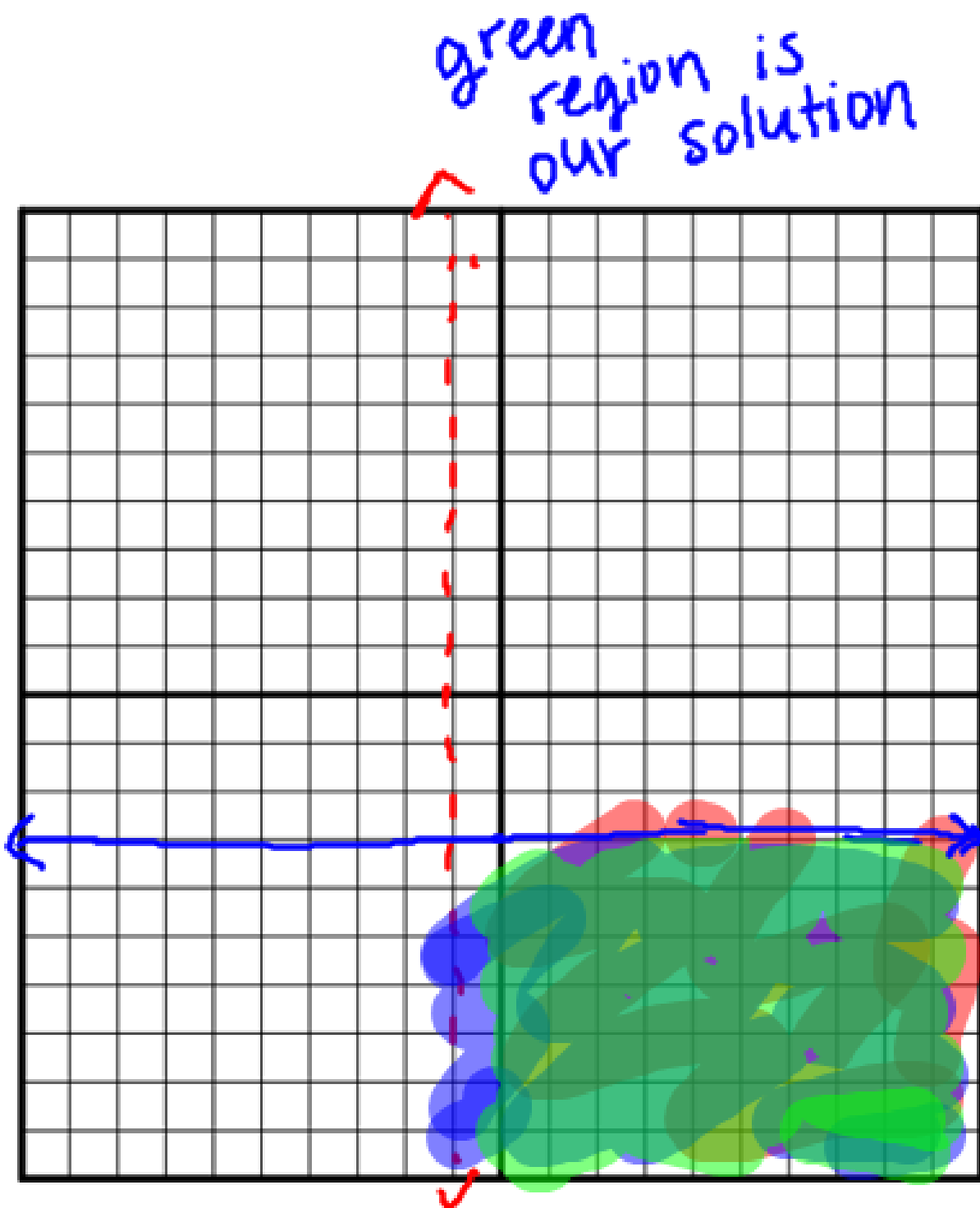
$$x + y = 4$$

$$3x + 3y = 12$$

$$\begin{array}{r} x + y = 4 \\ -x \quad -x \\ \hline y = -x + 4 \end{array}$$

$$\begin{array}{r} 3x + 3y = 12 \\ -3x \quad -3x \\ \hline 3y = -3x + 12 \\ \frac{3y}{3} = \frac{-3x + 12}{3} \\ y = -x + 4 \end{array}$$

$$\begin{aligned} x &> -1 \\ y &\leq 3 \end{aligned}$$



**3 OUT OF 2
PEOPLE
— HAVE —
TROUBLE
— WITH —
FRACTIONS**

Graphing a system of Equations or
Inequalities using a Calculator!!

Plus.....

More solving systems by Graphing!!!

Objectives....

- * You will be able to graph a system of equations/inequalities using a calculator.
- * You will be able to graph a system of equations/inequalities by hand and determine the number of solutions.

Graphing in the calculator reminders....

- 1. Make sure your equation is in slope-intercept form.*
- 2. Check your Window settings. Push the window button (2nd under the screen). Make sure your settings are as follows.*

$$X \text{ min} = -10$$

$$X \text{ max} = 10$$

$$X \text{ scl} = 1$$

$$Y \text{ min} = -10$$

$$Y \text{ max} = 10$$

$$Y \text{ scl} = 1$$

Example 1:

$$y = 3x - 4 \text{ and } y = x + 2$$

* If using the calculator, use the arrows to scroll on top of the intersection on the graph. Look at the bottom of the graph and round the x -value to the nearest whole number. Push 2nd and graph to go to the table and make sure that both y values are the same for that x value. That will be your answer.

Your answer should be: $(3, 5)$

Example 2:

$$y = 4x + 6 \text{ and } y = 2(2x + 3)$$

$$y = 4x + 6$$

Your answer should be: Infinte Solutions



Group Work Time!!!

*Solving Systems by
Graphing Investigations
Worksheet*

You can now....

- * Graph a system of equations/inequalities using a calculator.

- * Graph a system of equations/inequalities by hand.