

Algebra: Please clear your desk except for...

1. Assignment #19
2. Graph Paper and Ruler

For each function: Identify the slope.

Identify the y-intercept.

Sketch the graph labeling 3 points.

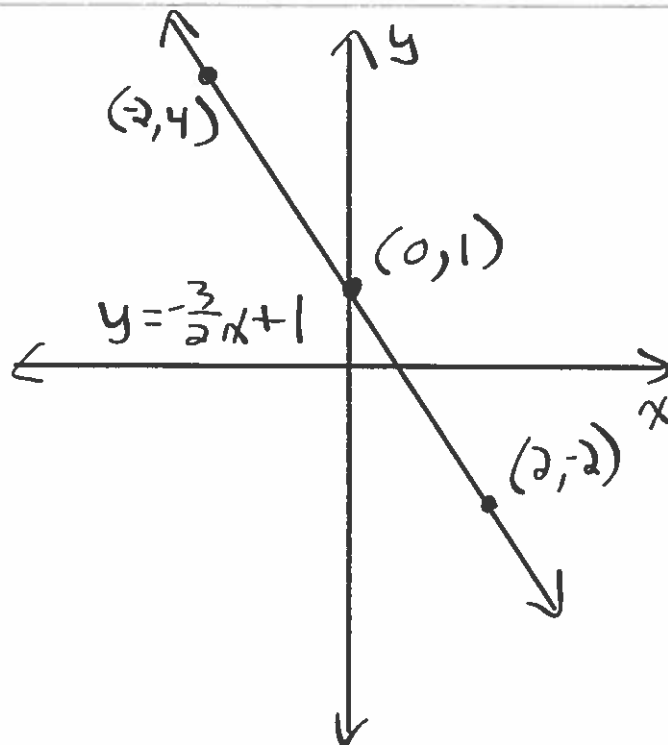
$$y = -\frac{3}{2}x + 1 \quad | \quad 7x + 2y = 12 \quad | \quad 3x - 8y = 8$$

$$y = -\frac{3}{2}x + 1$$

$$m = -\frac{3}{2} = \frac{\Delta y}{\Delta x}$$

$$m = \frac{-3}{2} = \frac{3}{-2}$$

$$y\text{-int } (0, 1)$$



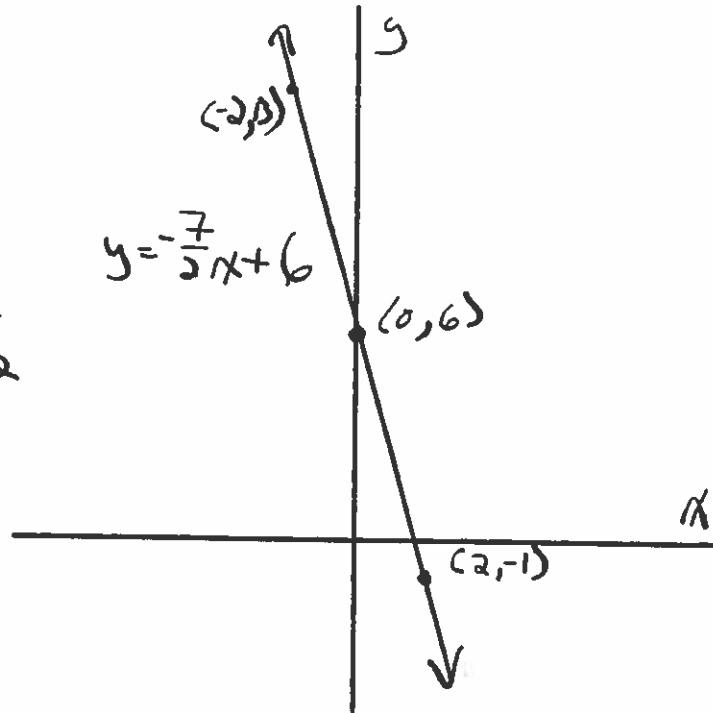
$$7x + 2y = 12$$

$$2y = -7x + 12$$

$$y = -\frac{7}{2}x + 6$$

$$m = \frac{-7}{2} = \frac{\Delta y}{\Delta x} = \frac{-7}{2} = -\frac{7}{2}$$

$$y\text{-int } (0, 6)$$



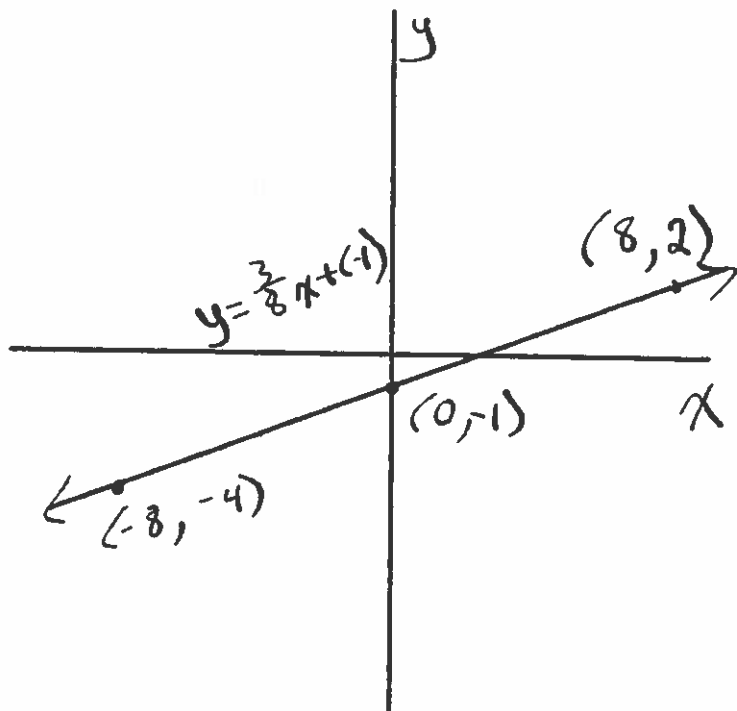
$$3x - 8y = 8$$

$$-8y = -3x + 8$$

$$y = \frac{3}{8}x + (-1)$$

$$m = \frac{3}{8} = \frac{\Delta y}{\Delta x} = \frac{3}{8}$$

$$y\text{-int } (0, -1)$$



Graphing Word Problems

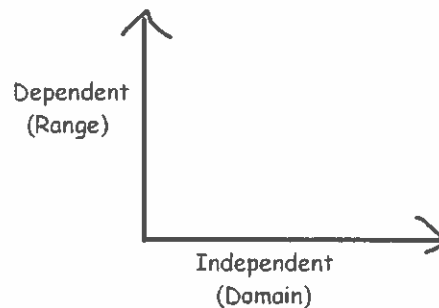
1. Determine the Dependent and Independent Variables.

DRY-MIX

Dependent - Responding - Y Manipulated - Independent - X

2. Find any appropriate intercepts and explain their meaning.
3. Sketch the graph of the possible solutions.
Label 4 points. Provide evidence that they are solutions.
Consider TAILS when making your graph.

Title
Axis
Intervals
Labels
Spacing



$$1. \quad 4S + 8L = 256$$

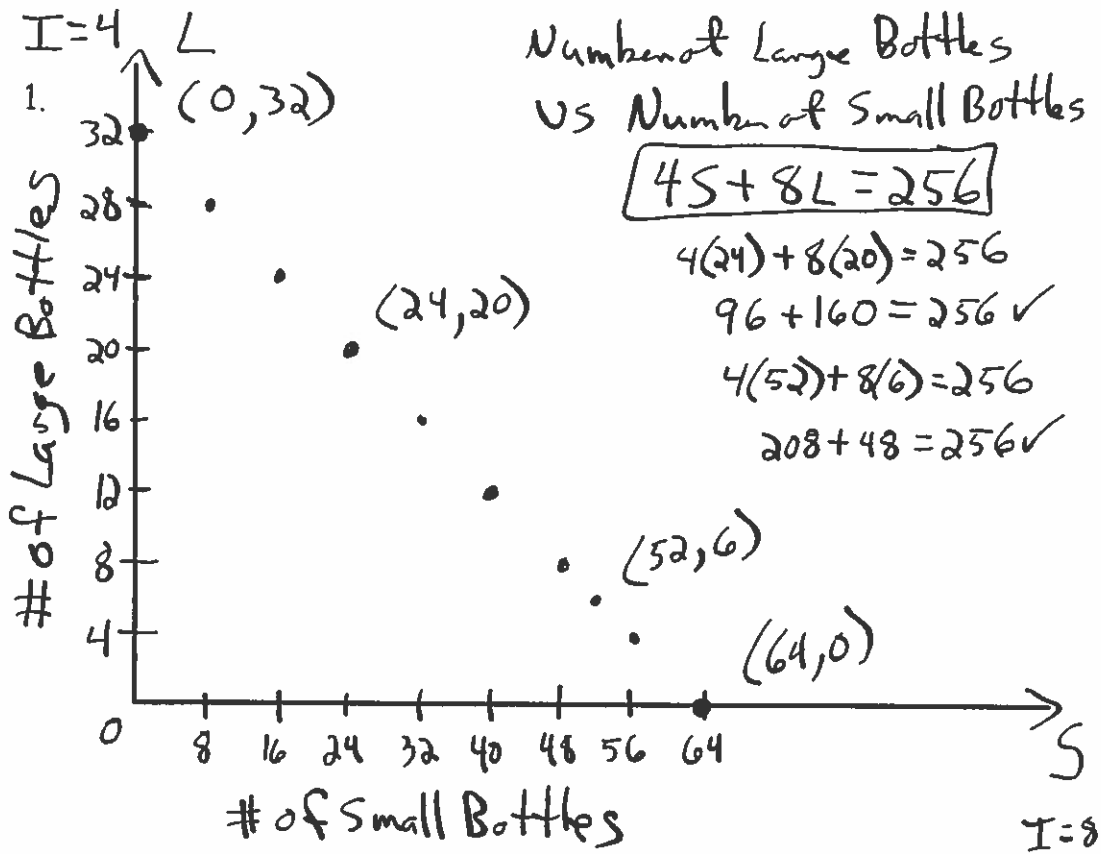
$S = \#$ of small bottles
 $L = \#$ of large bottles (S, L)

$$S = 0 \quad 8L = 256 \quad (0, 32) \quad \begin{array}{l} \text{Zero small bottles} \\ \text{and 32 large bottles} \\ \text{were returned.} \end{array}$$

$$L = 32$$

$$L = 0 \quad 4S = 256 \quad (64, 0) \quad \begin{array}{l} \text{Sixty-four small bottles} \\ \text{and 0 large bottles} \\ \text{were returned.} \end{array}$$

$$S = 64$$



2. $d = 3t$

$d = \#$ of miles hiked
 $t = \#$ of hours (t, d)

$t=0$ $d=3(0)$ $(0, 0)$ After 0 hours,
 $d=0$ 0 miles are hiked.

Domain t	Range $d=3t$	Solution (t, d)
0	0	(0, 0)
1	3	(1, 3)
2	6	(2, 6)
3	9	(3, 9)

