

Bathroom breaks
taken before

Do **NOT** move the desk!!

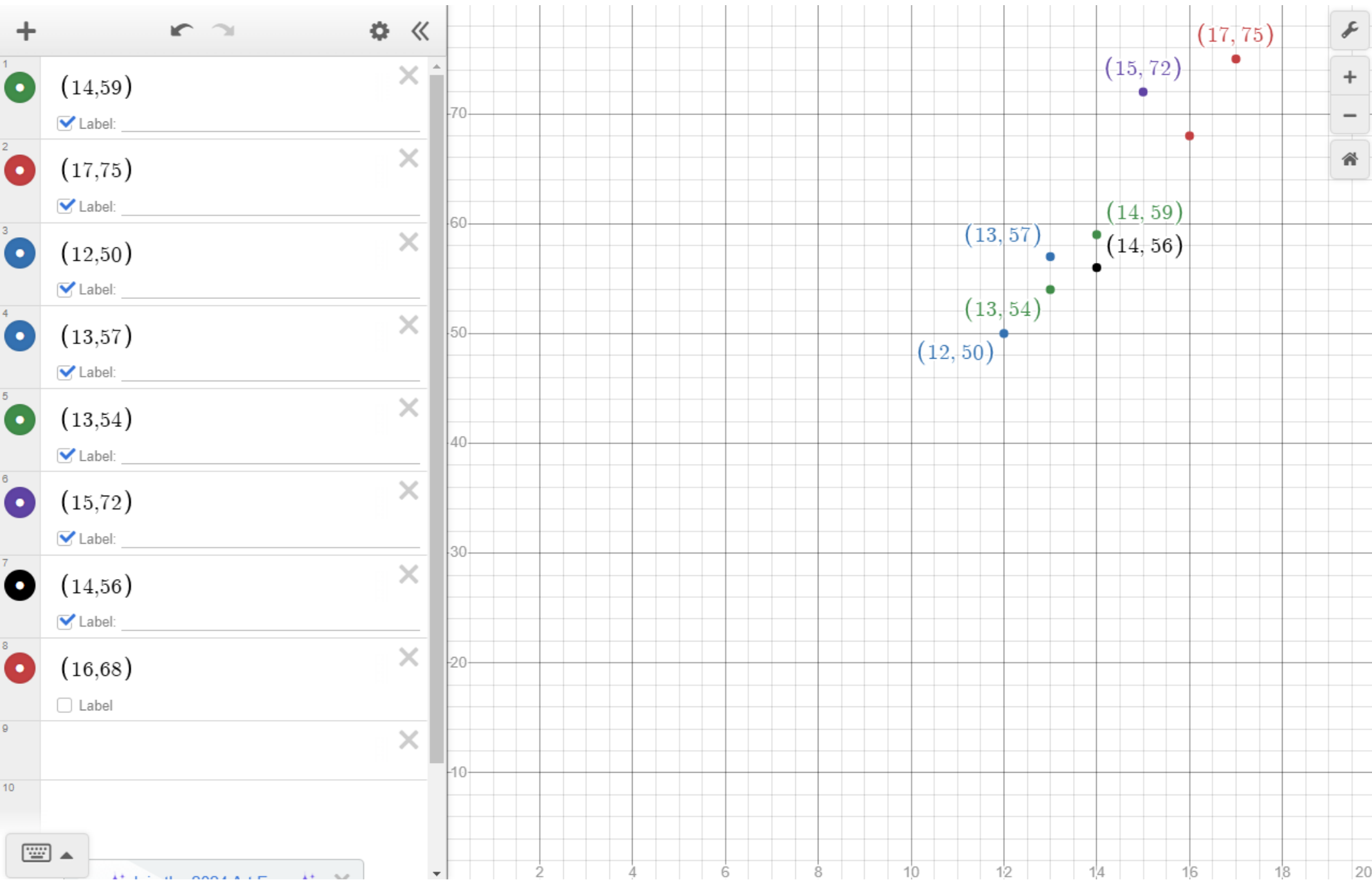
Turn your phone **OFF**!!

Put your phone up!!

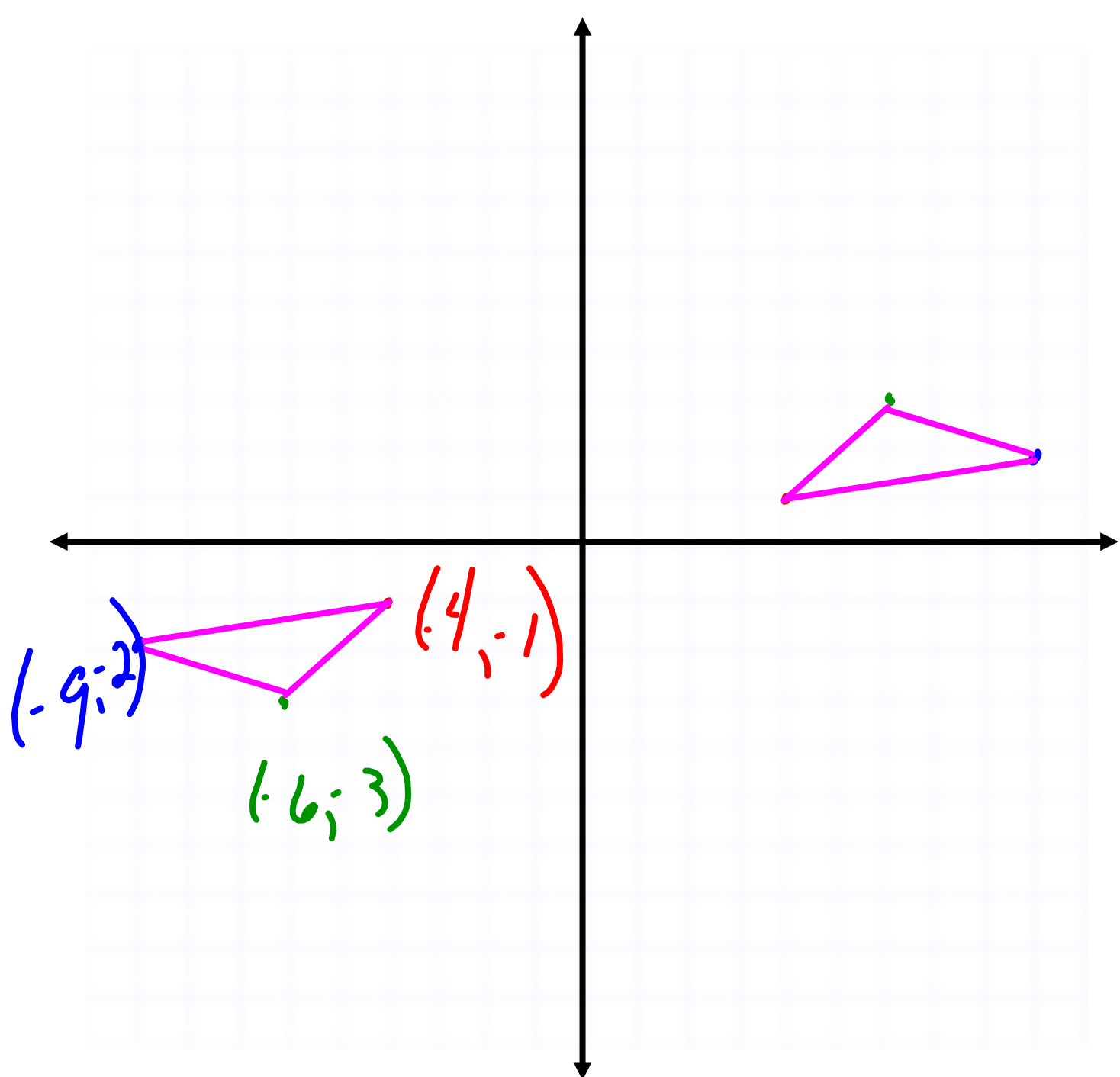
Sit down!! Be quiet!!

Prepare to work!!

Keep your hands to yourself!!



<https://www.desmos.com/calculator>



Pg 45

$$1) \quad \begin{matrix} (0, 7) & (12, 22) \\ x_1, y_1 & x_2, y_2 \end{matrix}$$

$$m = \frac{22 - 7}{12 - 0} = \frac{15}{12} = \frac{5}{4}$$

$$y - y_1 = m(x - x_1)$$

$$y - 7 = \frac{5}{4}(x - 0)$$

$$y - 7 = \frac{5}{4}x$$

$$y = \frac{5}{4}x + 7$$

$$m = \frac{5}{4} \quad b = 7$$

$$f(18) = \frac{5}{4}(18) + 7$$

$$f(18) = \frac{45}{2} + \frac{14}{2}$$

$$f(18) = \frac{59}{2} = 29\frac{1}{2}$$

$$(18, 29\frac{1}{2})$$

a)

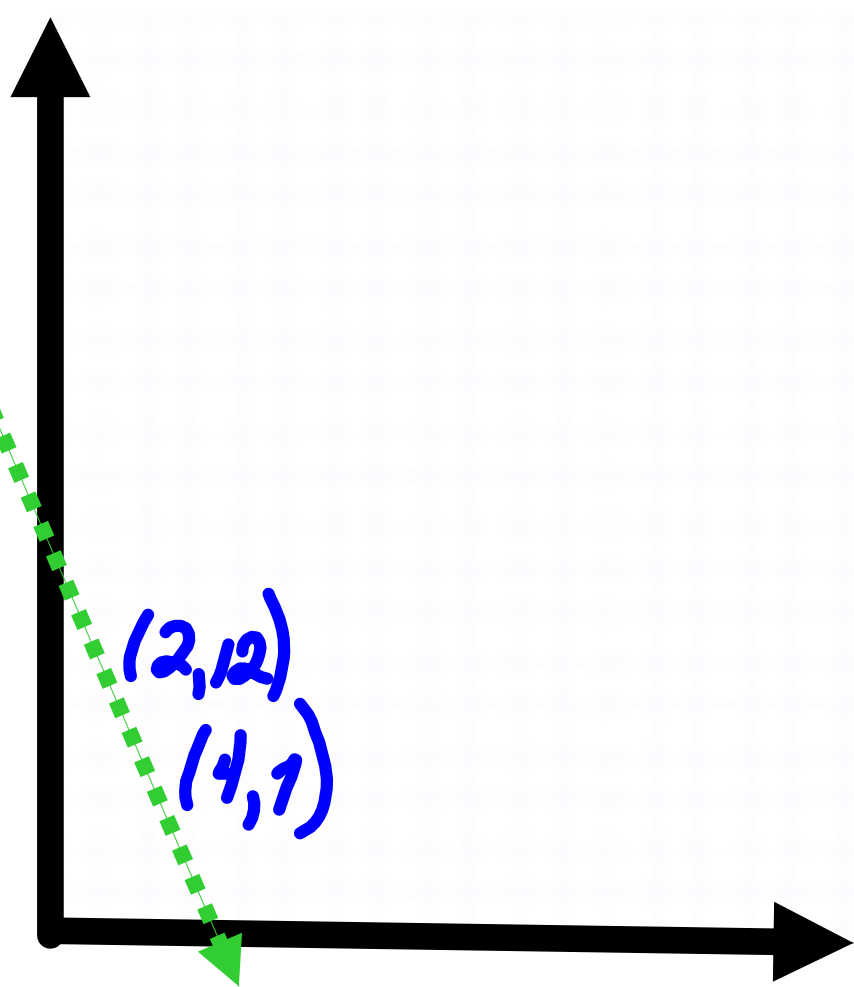
Weeks x	1	2	3	4	5	6	7
Losses y	15	12	10	7	6	3	1

$$m = \frac{7-12}{4-2} = -\frac{5}{2}$$

$$y - 12 = -\frac{5}{2}(x - 2)$$

$$y - 12 = -\frac{5}{2}x + 5$$

$$y = -\frac{5}{2}x + 17$$



Count by 2 Both ways

Negative

A correlation coefficient is a number that measures the strength and direction of a linear relationship between two variables in a data set:

- Value
 - The correlation coefficient ranges from -1 to 1.
- Direction
 - A positive correlation means that as one variable increases, so does the other. A negative correlation means that as one variable increases, the other decreases.
- Strength
 - A correlation coefficient closer to 1 indicates a stronger relationship. A correlation coefficient of 0 means there is no relationship between the variables.
- Perfect correlations
 - A correlation coefficient of 1 indicates a perfect positive correlation, while a correlation coefficient of -1 indicates a perfect negative correlation.

