

Name:

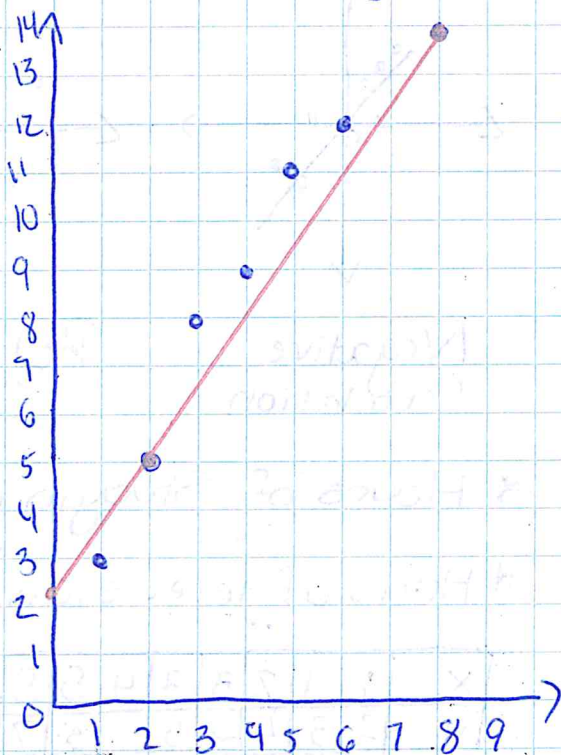
Alg I

Fit a line to Data

Line of fit: A line used to model the trend in the data.

Example 3:

x	1	2	3	4	5	6	8
y	3	5	8	9	11	12	14



$(2,5)$ $(8,14)$

$$b = 2$$

$$m = \frac{14-5}{8-2} = \frac{9-3}{6-3} = \frac{3}{2} = 1\frac{1}{2}$$

$$y = mx + b \quad (2,5)$$

$$5 = 1\frac{1}{2}(2) + b$$

$$5 = 3 + b$$

$$\begin{array}{r} -3 \\ -3 \end{array} \quad \underline{\quad} \quad b = 2$$

$$\boxed{y = 1\frac{1}{2}x + 2}$$

Example 4:

x	1	1	2	3	3	4	5	5	6
y	2	3	4	4	5	5	5	7	8

$= (5,7)$ and $(6,8)$

$$m = \frac{8-7}{6-5} = 1 \quad * \text{Rate of Change is about } 1$$

I can make scatter plots and write equations to model data.

Ch. 4 Quiz

* Complete Skills Practice, pg. 267, #