

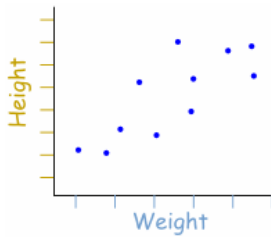
SECTION 4.4: SCATTER PLOTS & LINES OF FIT

Homework: _____

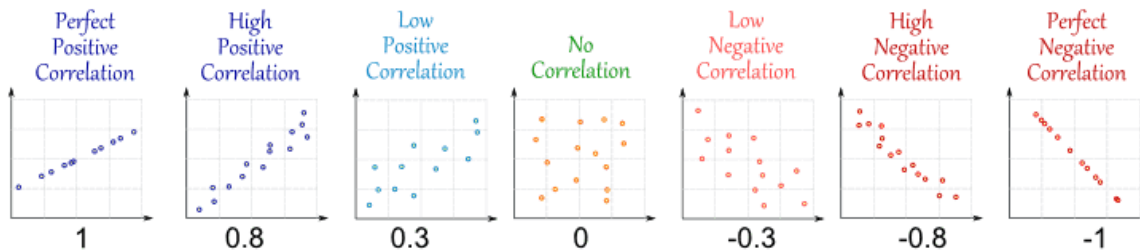
Learning Targets:

- 4g. Understanding of how to create and interpret a scatter plot and its correlation.
- 4h. Write, use, and interpret a line of best fit when given a set of data.

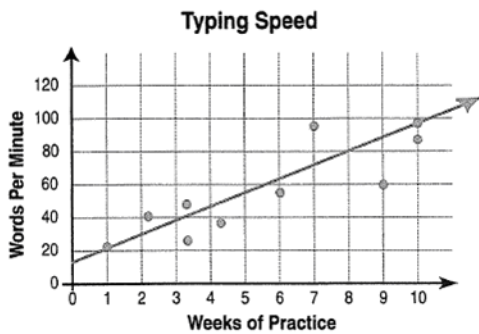
Scatter Plot: a graph of _____ that show the relationship between two sets of data.



Correlation: the _____ of two different types of data.



Line of Best Fit: a line that is as _____ to as many points as possible



Find the missing values using the scatter plot of Typing Speed

(1, _____) (9, _____)

(_____, 98) (_____, 40)

$f(6) = \underline{\hspace{2cm}}$ $f(\underline{\hspace{2cm}}) = 85$

Creating a line of best fit using a Calculator

1. **STAT**
2. Choose 1: _____

Enter x-values in L₁ and y-values in L₂

3. **STAT**
go to _____

Choose 4: _____

4. Write the equation in _____ form

5. The _____ is represented by _____

How to Clear Your Data from the Calculator

1. 2nd + (Mem)
 2. Choose 4: ClrAllLists
-

The table below shows the average daily energy requirements for male children and adolescents.

Daily Energy Requirements for Males							
Age (years)	1	2	5	8	11	14	17
Energy needed (calories)	1100	1300	1800	2200	2500	2800	3000

- 1) Find the line of best fit.
- 2) Interpret the slope and y-intercept of the graph.
- 3) Use the linear model to predict how many calories a 19-year old needs per day.
- 4) Use the linear model to predict the age of a male who needs over 4300 calories per day?