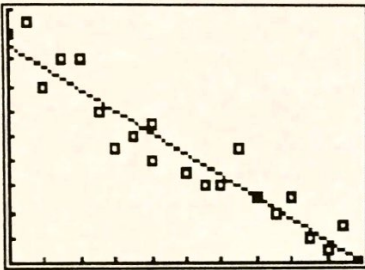


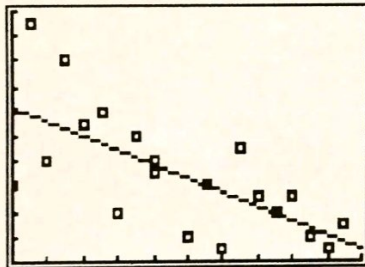
Vocabulary

- **Correlation Coefficient:** a number that describes the relationship between the points and the line.



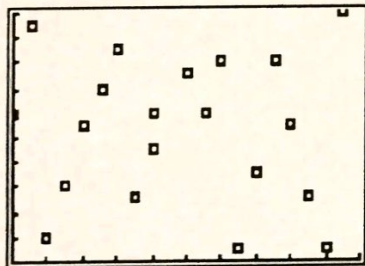
$$r = -0.90$$

positive slope
Left \rightarrow Right
uphill

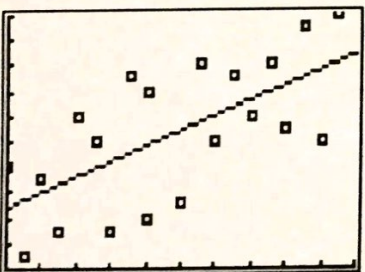


$$r = -0.50$$

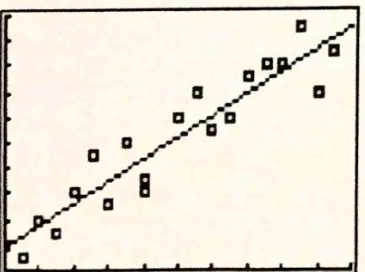
Negative slope
Left \rightarrow Right
downhill



$$r = 0.00$$

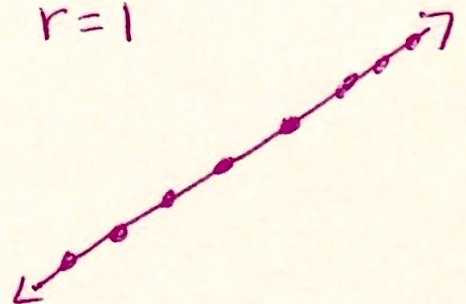


$$r = 0.50$$



$$r = 0.90$$

$$r = 1$$



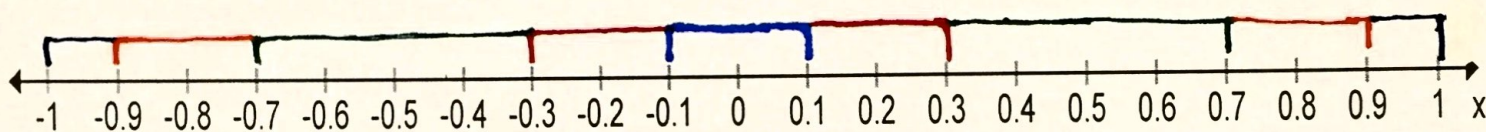
$$r = -1$$



Classifying the Correlation: (r)

- **Strength:** The closer the r is to -1 or 1 the **STRONGER** the correlation.

The closer r is to 0 the **WEAKER** the correlation.



Very weak $\pm 0 - \textcircled{.1}$

Weak $\pm .1 - \textcircled{.3}$

Moderate $\pm .3 - \textcircled{.7}$

Strong $\pm .7 - \textcircled{.9}$

Very strong $\pm .9 - \textcircled{1}$

- **Direction:**

Slope of the line is either positive or negative