- We can divide our covariance value by the standard deviations of our two variables (actually standard deviation of x multiplied by standard deviation of y) – in other words:

$$= \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{N - 1 s_x s_y}$$

- This is called the *Pearson product-moment correlation coefficient* and ranges from -1 (perfect negative correlation) to +1 (perfect positive correlation) with 0 meaning on correlation at all.

- SD of Study Time (X) = 1.140175
- SD of Exam Score (Y) = 0.8944272

$$\text{Pearson's R} = \frac{\sum (x_i - \bar{x})(y_i - \bar{y})}{N - 1 s_x s_y}$$

$$\text{Pearson's R} = \frac{2.8}{4 \text{ X } 1.14 \text{ X } 0.89}$$

$$= 0.69$$