## Calculating A Linear Regression Line Equation

1. Calculate $r$-value:

2. To get the slope of the line multiply the $\boldsymbol{r}$-value by the Standard Deviation of the $\boldsymbol{y}$-values over the $\boldsymbol{x}$-values:

$$
m=r\left(\frac{S y}{S x}\right)
$$

3. Plug in the means for $\boldsymbol{x}$-values and $\boldsymbol{y}$-values to get the $\boldsymbol{y}$-intercept:

