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

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

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

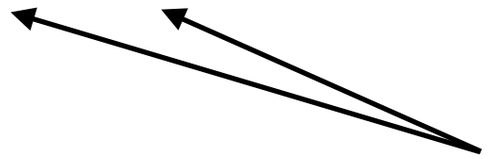
$$= 0.69$$

- In R, you need to install the “Hmisc” package first, and then load it:

```
> library(Hmisc) # Needed for correlation
```

- Our data frame is called “covary” and looks like this:

| Participant | Study Time | Exam Score | Mean_Exam_Score | Mean_Study_Time |
|---|---|---|---|---|
| 1 | 14 | 5 | 6.4 | 14.6 |
| 2 | 15 | 7 | 6.4 | 14.6 |
| 3 | 16 | 7 | 6.4 | 14.6 |
| 4 | 13 | 6 | 6.4 | 14.6 |
| 5 | 15 | 7 | 6.4 | 14.6 |



- To calculate Pearson’s R for these two variables we type:

```
> rcorr(covary$`Study Time`, covary$`Exam Score`)
```