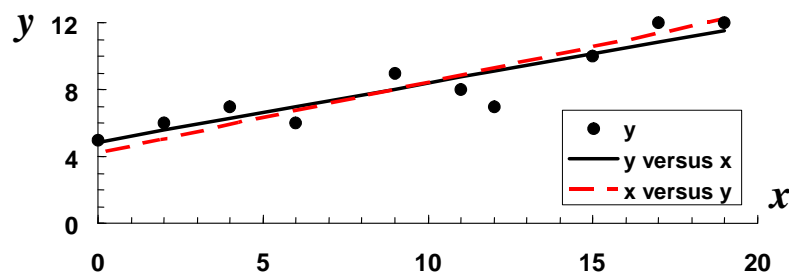


### Solution 17.3

The results can be summarized as

|                         | y versus x                | x versus y                 |
|-------------------------|---------------------------|----------------------------|
| Best fit equation       | $y = 4.851535 + 0.35247x$ | $x = -9.96763 + 2.374101y$ |
| Standard error          | 1.06501                   | 2.764026                   |
| Correlation coefficient | 0.914767                  | 0.914767                   |

We can also plot both lines on the same graph



Thus, the “best” fit lines and the standard errors differ. This makes sense because different errors are being minimized depending on our choice of the dependent (ordinate) and independent (abscissa) variables. In contrast, the correlation coefficients are identical since the same amount of uncertainty is explained regardless of how the points are plotted.