2G – The Coefficient of Determination (r2)

**CALCULATING THE COEFFICIENT OF DETERMINATION**

The coefficient of determination is found by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Pearson’s Correlation

Coefficient.

The value of r2 shows us the percentage of the variation in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

variable that can be explained by the variation in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ variable.

*EG1: If the level of carbon monoxide in the air is linearly related to traffic volume, with r = +0.985, calculate the coefficient of determination and explain what it means in a sentence:*

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*EG2: If mathematical test results are thought to depend upon verbal comprehension test results, and the resulting scatterplot has r = +0.275, calculate the coefficient of determination and explain what it means:*

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**CALCULATING THE r VALUE IF YOU ARE GIVEN r2**

This requires taking the \_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_ of the coefficient of determination,

but you need to look at the slope of the trend to work out the sign of r.

