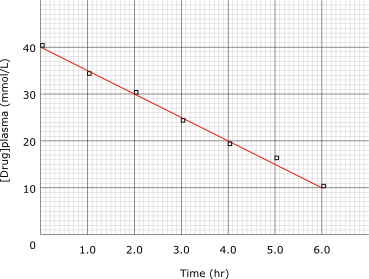
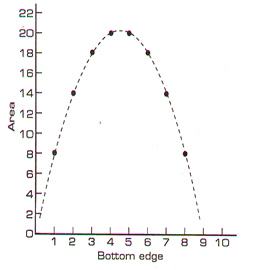
Scatterplots: Linear or Non-linear

Scatterplots: Linear OR Non linear

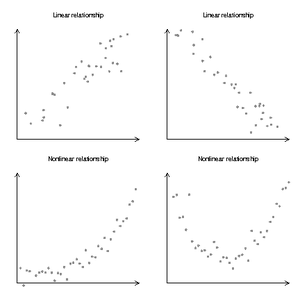
We have already seen that we can determine the type of relationship between the independent and dependent variables on a scatterplot.

If there is a strong positive trend, or strong negative trend, we can place a line of best fit through the data. Since a line fits the data the best, the relationship is called a LINEAR relationship.

Sometimes, a curve fits the data better. Here the curve of best fit shows that the relationship is NOT linear. This type of relationship is called NON-LINEAR.

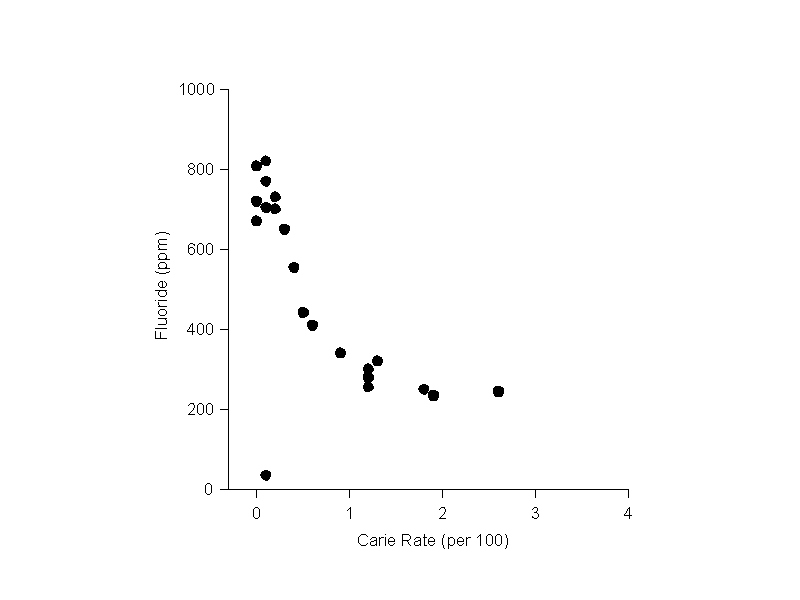


Remember that not all data has a relationship between the independent and dependent variables. When the trend is not strong, it can be more difficult to determine.

When you graph data in a scatterplot, you must determine

* Relationship or no relationship
* If a relationship: linear or non-linear
* Strong or weak
* Positive or negative

For each graph below:

* Identify the independent and dependent variables
* Identify if there is a trend in the data or no relationship
* If there is a trend in the data, is it linear or non-linear?
* Is the trend positive or negative? Strong or weak?
* Where there is a trend, place a line or curve of best fit

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| http://www.mathplanet.com/media/28784/graph03_498x250.jpg |
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