

Part 4.3: Relationship

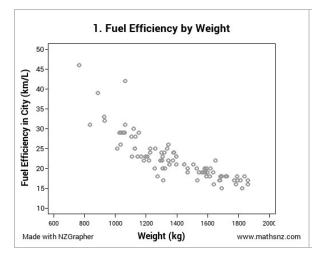
The statement about the relationship is about justifying the strength of the trend that **you can see** on your graph. It is important that you are commenting on what **you can see**. You can use the correlation coefficient (r-value) to **back up** your strength statement, but it should only be used as a backup... **what you can see** is the most important.

The r-value is a number between -1 and 1 indicating how strong the relationship is. The closer it is to 1 or -1 the stronger the relationship is, and the closer it is to zero the weaker the relationship is. A positive r-value indicates that the trend is positive, a negative r-value indicated the trend is negative.

The number line below is **just a guide**, remember what you can see with your eyes is most important.

Strong		Moderate	Weak	No F	Relation	ship	Weak	Moderate	Stro	ng
-1	-0.8	-0.6	-0.4	-0.2	Ó	0.2	0.4	0.6	0.8	1

Discuss the relationship for each of the sets of data, the first one has been done for you.



The relationship is strong and linear as I can see most the points form a fairly consistent pattern. This is confirmed by the correlation coefficient of -0.8431, indicating that the linear relationship is quite strong as r is between -0.75 and -1.