

Correlation: Relationship between two sets of data

There are three kinds of Linear Correlation

Positive Correlation

As one quantity
inc so does the other.
(Pos Slope)

Negative Correlation

As one quantity
inc the other dec.
(Neg Slope)

No Correlation

No obvious
relationship
between the data

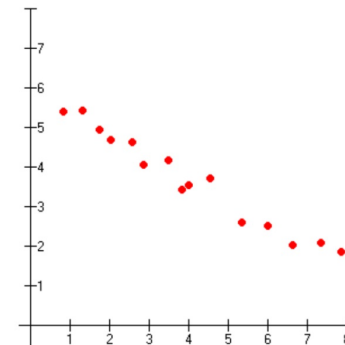
Strong Correlation

Most points are close
to the trend line.

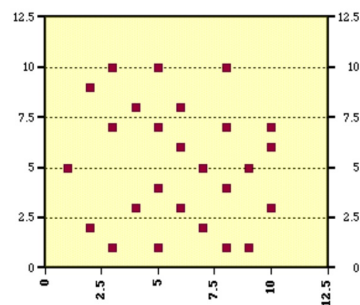
Weak Correlation

General trend but
points are not all
close to a trend line.

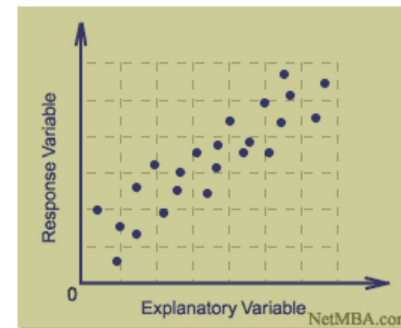
What type of correlation does each graph show?



Negative Correlation,
pretty Strong

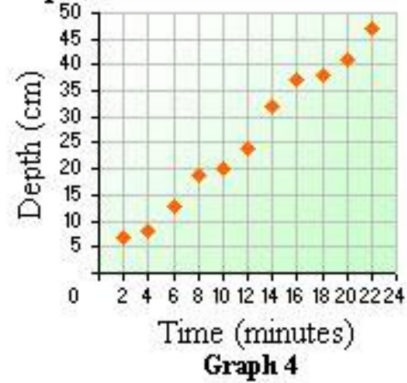


No Correlation

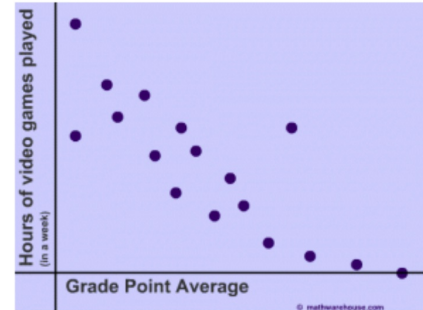


Positive Correlation
rather Weak

Depth of water at two-minute intervals

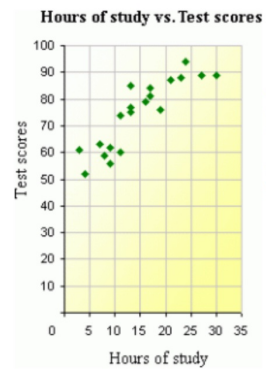


Positive Correlation
quite Strong



Negative Correlation
rather Weak

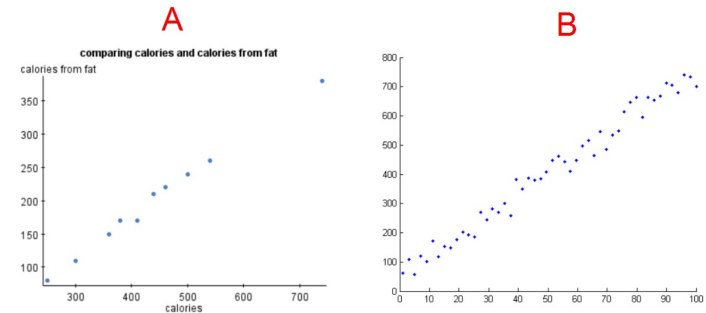
Is this a Strong or Weak Positive Correlation?



"Strong" and "Weak" are sometimes hard to define.

Sometimes you only use these terms when comparing two scatter plots

Which Correlation is stronger?



Graph A appears to be stronger Positive Correlation because the data seems closer to a single line than the data in graph B.

Linear Regression: Finding the equation of the "line of best fit".

