

AQA

A Level

A Level Mathematics

Correlation

Name:

M M E

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Total Marks:

L2- Correlation- Questions

AQA

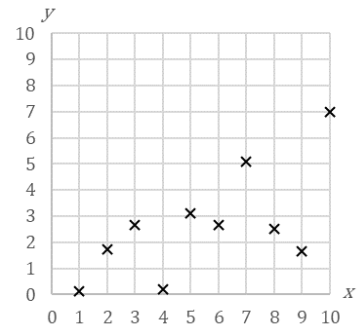
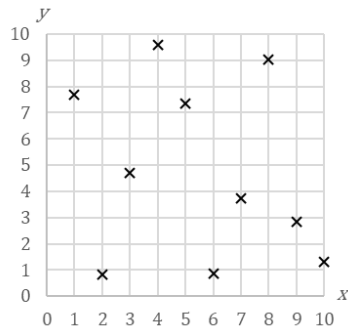
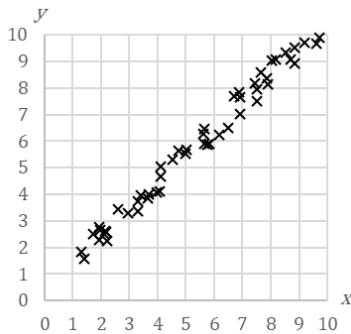
1) Frank says

“there is no link between the dependent and independent variable as when we calculated the correlation coefficient it was 1.94×10^{-6} ”.

- i) Write the number 1.94×10^{-6} in decimal form. [1]
- ii) Explain why Frank is incorrect, sketching a graph to support your argument. [2]

2) The following six graphs represent randomly generated bivariate data. The Pearson Correlation has been calculated for each but not stated.

- i) Match each graph to one of the values. [3]



0.66

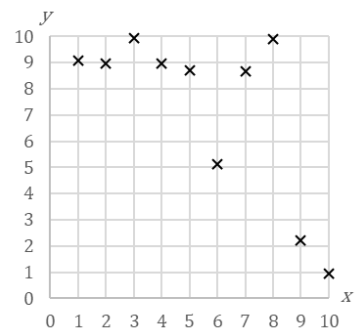
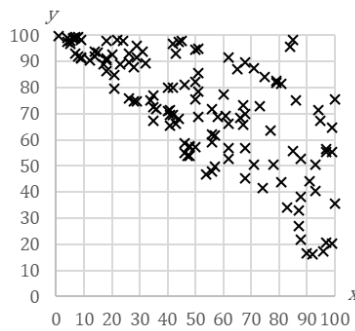
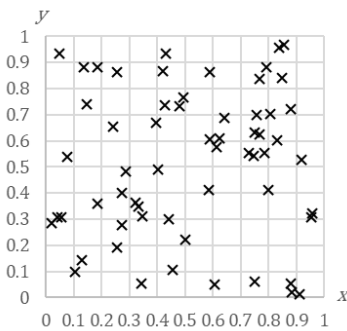
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0.87

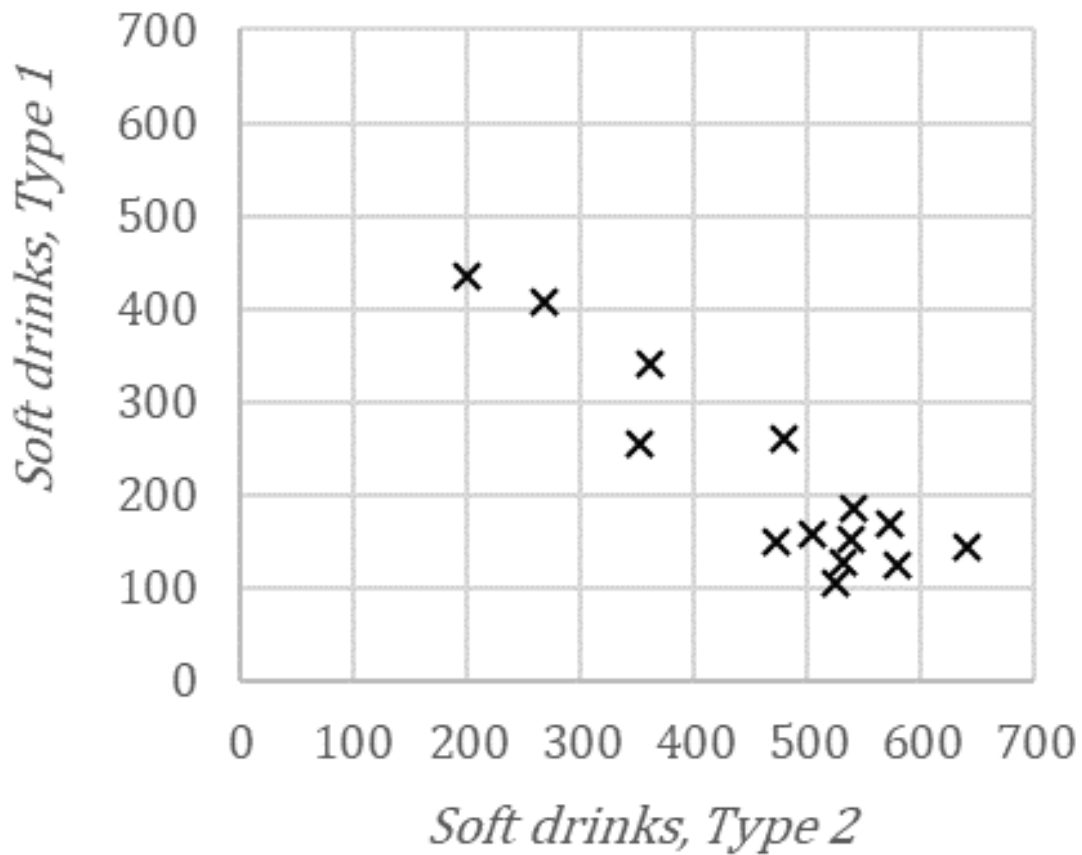
0.03

0.99

- ii) For the remaining three, estimate the coefficient to 1 decimal place. [3]



- 3) The large dataset¹ contains information on the consumption of soft drinks (m). The graph of two types is shown below.



- Describe the relationship in words. [2]
- Estimate the correlation. [1]
- Suggest what the two types of drink are. [1]

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