

Commentary on candidate evidence

The candidate evidence has achieved the following marks for each section of this project.

Introduction

Candidate 1

The candidate was awarded **3 out of 6 marks**.

Mark 1 was not awarded because the project did not have an introduction.

Mark 2 was awarded because the research question was appropriate.

Mark 3 was awarded because the candidate stated the type of data being studied.

Mark 4 was awarded because the candidate provided information on the background of the data source.

Mark 5 was not awarded because the candidate did not discuss why using the official website means the data will be valid.

Mark 6 was not awarded because the candidate did not discuss why using several sources means the data is unbiased.

Candidate 2

The candidate was awarded **6 out of 6 marks**

Mark 1 was awarded because the candidate provided an introduction.

Mark 2 was awarded because the candidate provided an appropriate research question.

Mark 3 was awarded because the candidate stated the type of data being studied.

Mark 4 was awarded because the candidate provided information on the background of the data source.

Mark 5 was awarded because there is evidence of a discussion about the data source and mitigation of potential errors.

Mark 6 was awarded because the candidate has discussed random sampling.

Candidate 3

The candidate was awarded **5 out of 6 marks**.

Mark 1 was awarded because the candidate provided an introduction to their project.

Mark 2 was awarded because the candidate provided an appropriate research question.

Mark 3 was awarded because the candidate stated the type of data being studied.

Mark 4 was awarded because the candidate provided information on the background of the data source.

Mark 5 was not awarded because the candidate has mentioned that their data comes from a reliable source without explaining why it might be reliable.

Mark 6 was awarded because the candidate discussed cross referencing.

Subjective Impression

Candidate 4

The candidate was awarded **4 out of 8 marks**.

Mark 7 was awarded because the candidate generated a scatterplot which is an appropriate graphical display for this type of data.

Mark 8 was not awarded because the candidate only created one boxplot, whereas two were required.

Mark 9 was not awarded because the candidate assumed that there is already a positive relationship, and they have not commented on how helpful the display is in terms of visualising the relevant statistics.

Mark 10 was not awarded because there was no attempt at a comment.

Mark 11 was not awarded because the title of the scatterplot does not match the graph.

Mark 12 was awarded because the candidate has included an appropriate location for the data.

Mark 13 was awarded because the candidate has included the appropriate spread for the data.

Mark 14 was awarded because the candidate has labelled the statistics appropriately.

Candidate 5

The candidate was awarded **7 out of 8 marks**.

Mark 7 was awarded because the candidate generated a scatterplot which is an appropriate graphical display for this type of data.

Mark 8 was awarded because the candidate generated two histograms which are appropriate graphical displays for this type of data.

Mark 9 was awarded because the candidate stated that the boxplot can be used to compare average and 'tell' the distribution.

Mark 10 was awarded because the candidate stated that the histograms can be used to show if the data is normally distributed or not.

Mark 11 was not awarded because the labels for both the x and y axes are missing from the boxplot.

Mark 12 was awarded because the candidate has included an appropriate location for the data which was justified by their histograms.

Mark 13 was awarded because the candidate has included the appropriate spread for the data corresponding to the choice of location.

Mark 14 was awarded because the candidate has labelled the statistics appropriately.

Candidate 6

The candidate was awarded **4 out of 8 marks**.

Mark 7 was awarded because the candidate generated a scatterplot which is an appropriate graphical display for this type of data.

Mark 8 was not awarded because the candidate has only created one boxplot, whereas two were required.

Mark 9 was awarded because the candidate stated that the boxplot can be used to see the location, spread and outliers.

Mark 10 was awarded because the candidate stated that the scatterplot could be used to identify a relationship. The context was included; however, there was no analysis of the relationship at this stage.

Mark 11 was not awarded because the title of the scatterplot does not match the graph.

Mark 12 was not awarded because the candidate no choice of location made.

Mark 13 was not awarded because the candidate has only provided the measure of spread for temperature.

Mark 14 was awarded because the candidate has labelled the statistics appropriately.

Analysis and Interpretation

Candidate 7

The candidate was awarded **4 out of 6 marks**.

Mark 15 was awarded because the candidate chose the PPMC which is an appropriate statistical test for their data.

Mark 16 was awarded because the candidate generated an appropriate output for this test.

Mark 17 was awarded because the candidate stated the strength of the linear relationship in context.

Mark 18 was not awarded because the candidate's interpretation includes reference to a positive relationship (before they have started their analysis) which had not yet been shown.

Mark 19 was not awarded due to their incorrect analysis of standard deviations and there is no comparison between the variables.

Mark 20 was awarded because the candidate interpreted the graphical display in context.

Candidate 8

The candidate was awarded **5 out of 6 marks**.

Mark 15 was awarded because the candidate chose an unpaired t-test which is an appropriate statistical test for their data.

Mark 16 was awarded because the candidate generated the appropriate output for this test.

Mark 17 was awarded because the candidate interpreted the confidence interval in context.

Mark 18 was awarded because the candidate stated that they failed to reject the null hypothesis.

Mark 19 was not awarded because the candidate stated that the 'serves are more consistent' rather than 'serve speed is more consistent'.

Mark 20 was awarded because the candidate interpreted the graphical display in context.

Candidate 9

The candidate was awarded **2 out of 6 marks**.

Mark 15 was awarded because the candidate chose a z-test which is an appropriate statistical test for their data.

Mark 16 was not awarded because the candidate made an error in the input for this test.

Mark 17 was not awarded because the candidate did not attempt to interpret a confidence interval.

Mark 18 was not awarded because the candidate did not mention proportions.

Mark 19 was not awarded because the candidate did not mention proportions and there is no context.

Mark 20 was awarded because the candidate interpreted at least one graphical display in context.

Conclusion

Candidate 10

The candidate was awarded **2 out of 4 marks**.

Mark 21 was awarded for repetition of interpretation of all graphs and linking the conclusion of the research question.

Mark 22 was not awarded because the candidate did not repeat the interpretation of all descriptive statistics.

Mark 23 was awarded because the candidate made a connection between the additional statistics and the conclusion.

Mark 24 was not awarded; this mark was not available since mark 22 was not awarded.

Candidate 11

The candidate was awarded **2 out of 4 marks**.

Mark 21 was awarded for repetition of interpretation of all graphs and linking the conclusion of the research question.

Mark 22 was awarded for repetition of interpretation of all descriptive statistics and for linking the conclusion to the research question.

Mark 23 was not awarded because the candidate did not attempt to repeat the interpretation of the confidence interval.

Mark 24 was not awarded; this mark was not available since mark 23 was not awarded.

Candidate 12

The candidate was awarded **4 out of 4 marks**.

Mark 21 was awarded for the repetition of interpretation of all graphs and linking the conclusion of the research question.

Mark 22 was awarded for the repetition of interpretation of all descriptive statistics and for linking the conclusion to the research question.

Mark 23 was awarded because the candidate made a connection between the additional statistics and the conclusion.

Mark 24 was awarded because the candidate stated the final conclusion to the research question having referenced all graphical displays and statistics in context and justified their validity clearly.

Presentation

Candidate 13

The candidate was awarded **2 out of 6 marks**.

Mark 25 was awarded because the candidate used appropriate text to introduce graphical displays within the appropriate sections.

Mark 26 was awarded because the candidate used appropriate text to introduce descriptive statistics within the appropriate sections.

Candidate 14

The candidate was awarded **out of 6 marks**.

Mark 25 was not awarded because the candidate did not use appropriate text to introduce graphical displays within the appropriate sections.

Mark 26 was not awarded because the candidate did not use appropriate text to introduce descriptive statistics within the appropriate sections.

Mark 27 was not awarded because the candidate did not use appropriate text to introduce additional statistics within the appropriate sections.