The following data gives ages in years and times in seconds for competitors for the 200m from Australia and England.

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<tbody>
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</tbody>
</table>

1. Describe whether age and time are numerical or categorical data and whether they are discrete or continuous.
2. Find the mean and mode of the Australian ages and discuss.
3. Draw a histogram for Australian ages.
4. Draw a back to back stem and leaf plot for the times for Australia and England.
5. Find the minimum value, $Q_1$, median, $Q_3$ and highest value for:
   a) Australian times
   b) England times
7. Discuss their shape, centre and spread.
8. Looking at the age and time for Australia, which is the dependent variable, and which is the independent variable.
9. Draw a scatterplot for the Australian data.
10. Find $r$ and discuss.
11. Find $r^2$ and discuss.
12. Find the least squares regression line
13. Interpret the slope and y-intercept
14. Plot the age vs times for England using graph paper.
15. Using the three median line find the equation to compare Englands’ age and time.
16. Interpret the slope and y-intercept.

Due: Friday 30th March