Marks

Question 16 (continued)

(a) Outline TWO changes that could be made to the experimental procedure that would improve its accuracy. **2**

~~[illegible] angle~~ a ~~constant for each~~ repeat each length twice, and use average as result.

(b) Compare Kim's and Ali's methods of calculating g and identify the better approach. **3**

Ali used a graph to show her results, this shows a constant line (increasing). Kim's just shows g without a graph to better understand the results.

Ali's was a better approach, ~~and could be better if the last~~

(c) Calculate the value of g from the line of best fit on Ali's graph. **3**

$\frac{0.57^2}{0.08} = 4.06125$ $\frac{0.67^2}{0.11} = 4.080$...

$\frac{0.62^2}{0.09} = 4.2711i$ $\frac{0.70^2}{0.12} = 4.083$.

$\frac{0.65^2}{0.1} = 4.225$ etc.

$g = 4.144$ (approx av.).

End of Question 16