Criterion:	0	1	2	3	4	5	6	7	8	9	10	Mark /10 for this criterion	Participant number 254887
Calculation of the parameters for the unweighted fit: Gradient, intercept, and uncertainties (weighted at 5%)	*Not calculated*				*Major error in calculation that should have been spotted and corrected. Values calculated are clearly wrong*		*Values calculated are incorrect, but nonetheless may have been considered to be feasible.*				*Correctly calculated using the equations already seen in session 5, results output at full precision*	**8**	Good - correctly calculated. Remember equations of lines may also require units.
Calculation of the parameters for the weighted fit: Gradient, intercept, and uncertainties (weighted at 20%)	*Not calculated*				*Major error in calculation that should have been spotted and corrected. Values calculated are clearly wrong*		*Values calculated are incorrect, but nonetheless may have been considered to be feasible.*				*Correctly calculated using the equations from the script, results output at full precision*	**8**	as above
Value of e/m for the unweighted fit (weighted at 10%)	*Not calculated*			*Mistake in the calculation of e/m, calculated value clearly wrong, or wrong with no error propagation*	*Value of e/m correctly calculated, but no attempt to propagate errors.*	*Mistake in the calculation of e/m, nonetheless the value calculated may have been considered to be feasible, and errors propagated*	*Value of e/m correctly calculated, but errors incorrectly propagated*				*Correctly calculated from the unweighted fit parameters, together with fully propagated error calculations*	**8**	Correctly calculated but should also be output to full precision.
Value of e/m for the weighted fit (weighted at 10%)	*Not calculated*			*Mistake in the calculation of e/m, calculated value clearly wrong, or wrong with no error propagation*	*Value of e/m correctly calculated, but no attempt to propagate errors.*	*Mistake in the calculation of e/m, nonetheless the value calculated may have been considered to be feasible, and errors propagated*	*Value of e/m correctly calculated, but errors incorrectly propagated*				*Correctly calculated from the weighted fit parameters, together with fully propagated error calculations*	**8**	as above
Precision (weighted at 5%)	No attempt to address precision.				*Little effort to address appropriate precision*		*Some values do not have appropriate precision.*				*Calculated quantities are shown to full precision during workings, but final results given with errors to 1sf and value to same precision.*	**6**	see above
Units (weighted at 2%)	*No units present*				*Most units missing or wrong*		*Some units missing or wrong*				*Units are present and correct throughout in outputs and text cells, and in code comments where appropriate.*	**6**	Note that your equations for the lines should have units.
Plots (weighted at 8%)	*No plot produced by the submitted code.*			*Inadequate plots - for example, missing axis labels or titles.*		*Most but not all requirements of the plots met - for example, incomplete legend, or errors in the axis labels/title*			*All plot requirements met: everything is clearly plotted and correctly and appropriately labelled.*		*Exemplary plotting throughout, aesthetically perfect, publication quality.*	**5**	Fantastic that you considered colour-blindness. Include your error bar on the data point in your legend. Title is ok and axis labels are good.
Code style (weighted at 10%)	*Code would require significant correction before it can be run.*				*Code has errors (requiring the marker to correct it before it can be run) - for example an undefined variable or code cells wrongly ordered.*		*The code runs with no errors, but is somewhat inefficient or poorly structured, or has a poor choice of variable names*		*Code is clear, follows best practice guidelines, with a good effort made to ensure appropriate variable names and efficiency of calculation. Runs without errors or warnings.*		*Code is exceptionally clear, efficient, well-structured and follows best practice throughout.*	**8**	Good code which works well.
Code commenting (weighted at 10%)	*No comments are included*			*Code is massively undercommented.*		*Code is undercommented, or comments are not useful, or so unnecessarily verbose that readability is affected.*	*Code is commented where needed. Complicated parts of code have a higher level of commenting than simpler parts, however comments are overly verbose.*		*Code is clearly and concisely commented where needed. Complicated parts of code have a higher level of commenting than simpler parts.*		*Exceptional level of commenting throughout the code. Clear, concise and readable throughout.*	**7**	Referring to equations makes it easier to see what is going on.
Text cells and discussion (weighted at 10%)	*Text cells have not been included*			*Not enough text cells included to create a self-contained document, or poor quality, for example grammatical/linguistic errors severely affecting the readability of the commentary.*			*Acceptable commentary, but needs expansion in places. For example, missing explanation of how the equations were rearranged to determine what quantity the gradient represents.*		*Good commentary resulting in a clear, self-contained document. Text cells consist of complete, well-structured and grammatical paragraphs. It is clear what the student is calculating, how they are going about it, and why they are doing it. A clear understanding of the physics of the problem is demonstrated.*		*Exceptional quality of the text commentary, resulting in an exemplary, self-contained document. Results are fully discussed throughout, showing an excellent understanding of the physics.*	**6**	Re-read text cells - your first one about the experiment claims the electron beam travelled a circular path before the magnetic field was even applied! I assume this was an error! Do explain all the terms in your equations.
Conclusions (weighted at 10%)	*No attempt at conclusions*			*An attempt at a conclusions section has been made, but is inadequately detailed or draws obviously incorrect conclusions.*			*Acceptable conclusions. Eg: The results and their implications are discussed, but the conclusions drawn are not necessarily fully valid; or room for deeper discussion.*		*Good conclusions section. The results are fully discussed and their implications clearly understood*		*An exemplary conclusions section is presented, with exceptional insight shown.*	**4**	Not sure you made the right conclusion - perhaps discussing it further might have helped. Why do we use a weighted fit?

TOTAL (/100): **69.20**