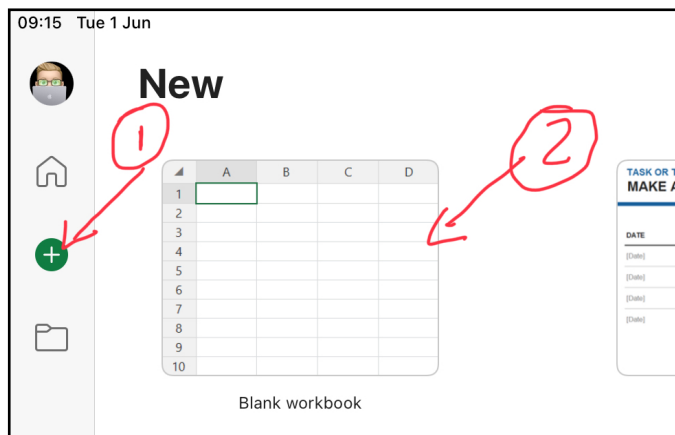


Guide to Physics Graphing on Excel for iPadOS.

Graphing on Excel is a very important skill to learn in physics, a lot of the main functions can be replicated and apple numbers, however some function required for AH Physics are only available on Excel. (These functions are on separate documents)

Step 1: Setting up the table



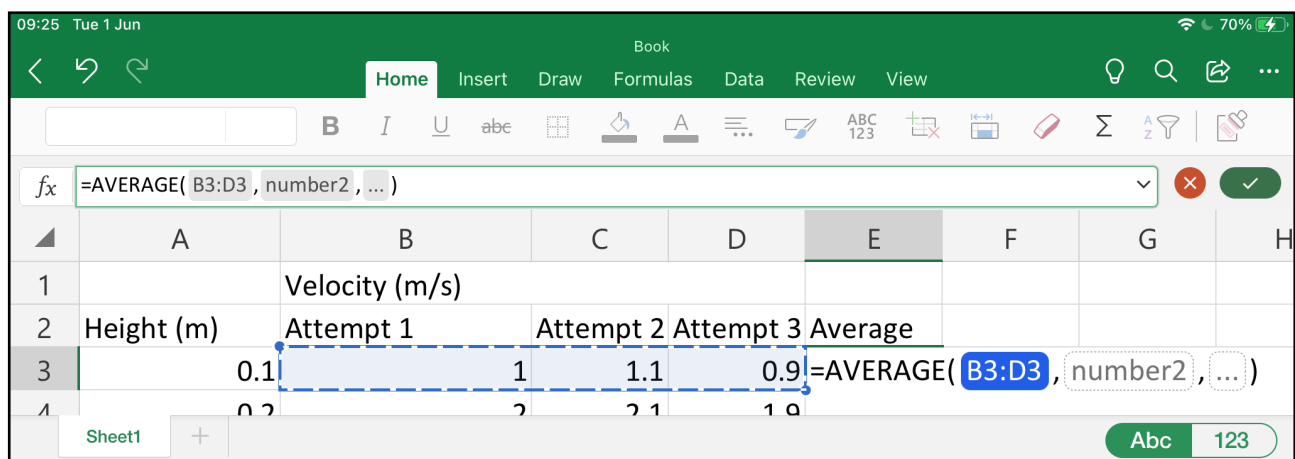
Open Excel, and a new table

Height (m)	Velocity (m/s)	Attempt 1	Attempt 2	Attempt 3	Average
0.1	1	1.1	0.9		
0.2	2	2.1	1.9		
0.3	3	3.1	2.9		
0.4	4	4.1	3.9		
0.5	5	5.1	4.9		
0.6	6	6.1	5.9		
0.7	7	7.1	6.9		
0.8	8	8.1	7.9		
0.9	9	9.1	8.9		

Input the raw data into the standard table format

Step 2: Averages

There is no longer a need to calculate an average for ever set of results, Excel can do this for you.



Click on an average box, type “=AVERAGE”,

The click on the first

Now click and drag the wee blue square that appears and select all cell you need averaged.

[illegible]

Click on the cell with your average and select fill

	A	B	C	D	E	F
1		Velocity (m/s)				
2	Height (m)	Attempt 1	Attempt 2	Attempt 3	Average	
3	0.1	1	1.1	0.9	1	
4	0.2	2	2.1	1.9	2	
5	0.3	3	3.1	2.9	3	
6	0.4	4	4.1	3.9	4	
7	0.5	5	5.1	4.9	5	
8	0.6	6	6.1	5.9	6	
9	0.7	7	7.1	6.9	7	
10	0.8	8	8.1	7.9	8	
11	0.9	9	9.1	8.9	9	
12						

Step 3: Setting up the Graph

Before setting up the graph, you should copy your raw data onto a document ready for the report write up.

	A	B	C	D	E	F	G	H	
1	Velocity (m/s)								
2	Cut	Copy	Paste	Delete	Clear Contents	Insert	Fill	Hide	Comment
3	0.1	1	1.1	0.9	1				
4	0.2	2	2.1	1.9	2				
5	0.3	3	3.1	2.9	3				
6	0.4	4	4.1	3.9	4				
7	0.5	5	5.1	4.9	5				
8	0.6	6	6.1	5.9	6				
9	0.7	7	7.1	6.9	7				
10	0.8	8	8.1	7.9	8				
11	0.9	9	9.1	8.9	9				
12									

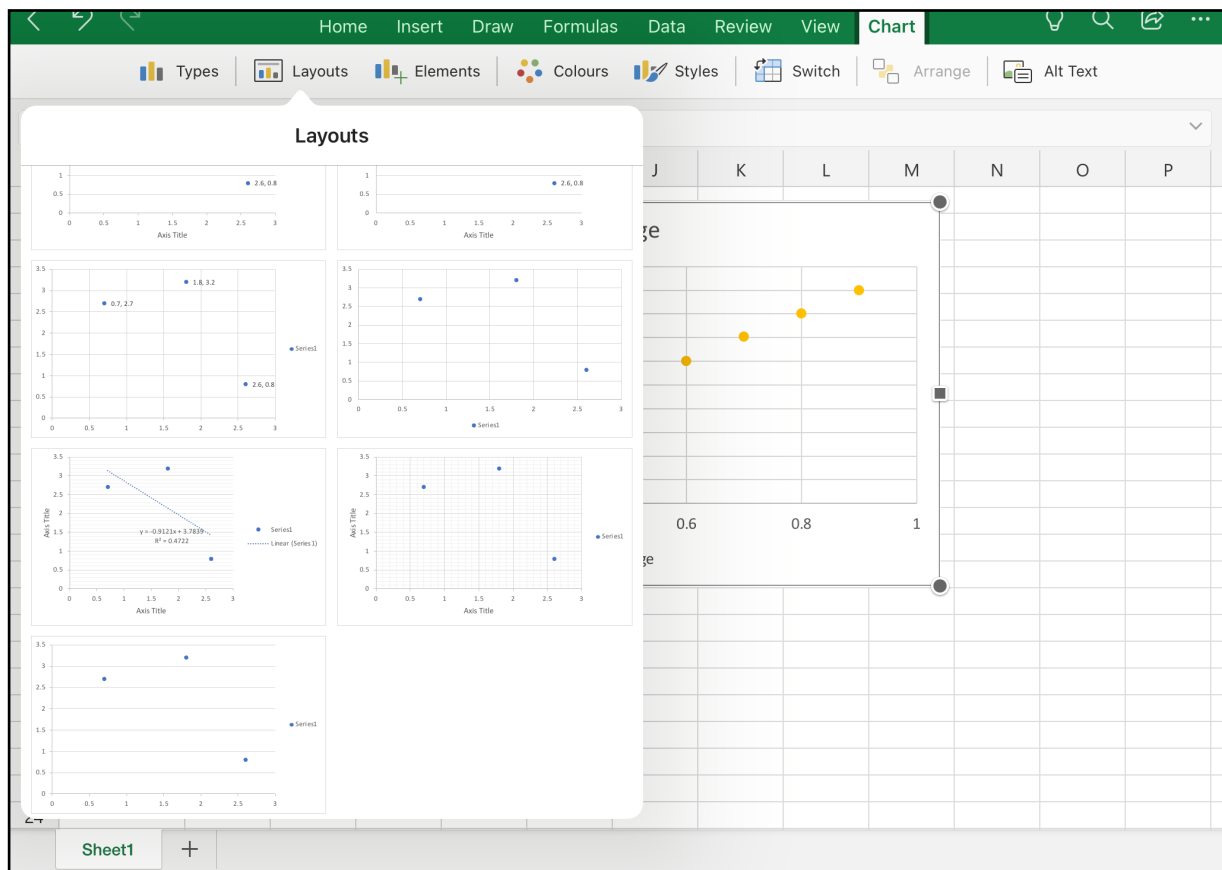
First hide the cells you do not want in the graph (select columns and click hide)

The screenshot shows a spreadsheet application interface. On the left, a data table is visible with columns A and E selected. The table contains the following data:

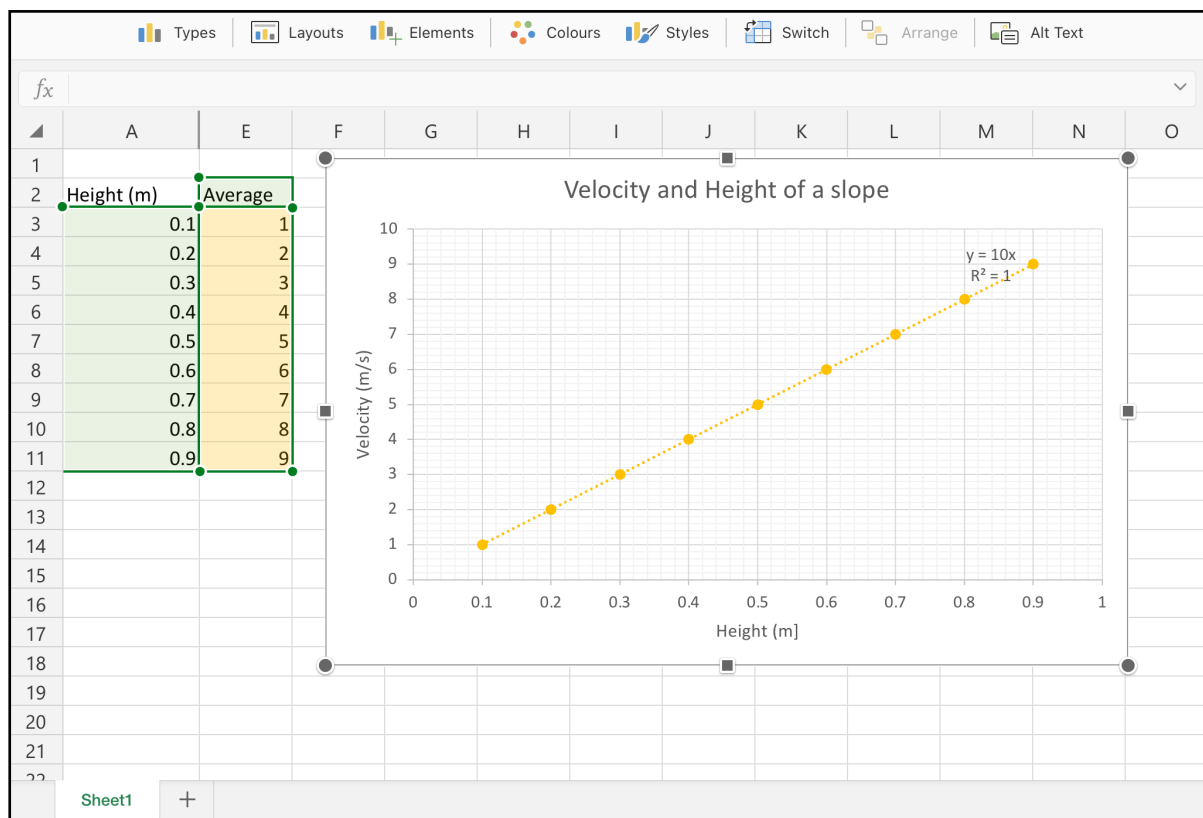
Height (m)	Average
0.1	1
0.2	2
0.3	3
0.4	4
0.5	5
0.6	6
0.7	7
0.8	8
0.9	9

On the right, a 'Chart' selection menu is open, showing various chart types. The 'X Y (Scatter)' chart type is selected, and the first chart in the list is highlighted. The chart shows two data series, 'Series1' (blue line) and 'Series2' (orange line), plotted against a grid. The chart title is 'Chart Title'.

Select the data you need for the graph, then click Insert, Chart, Scatter, and the first one on the left.



In the chart tab, select styles, then chose one that has a Trend line, Equation of the line and R² Value.



Use the elements function on the Chart Tab to make sure you have Major and Minor Gridline on both axes, No Legend, Axis and Chart Titles