

two 8's

ONE PROBLEM PER SHEET
 RENAME YOUR SHEETS 'PROBLEM 1' 'PROBLEM 2' ETC..
 COMMENT YOUR CELLS (top of columns only)

PROBLEM ONE:

- Generate a column starting at A5 and going down till A105 such that the value starts at 2 in A5 and increases by 0.5 each time you move one cell down the column.
- In column B make the value in B5 equal to the function $(3x^2 - 2x + 5)$ and apply it to the rest of the column, down to B105 (use x such that $B5 = 3A5^2 - 2A5 + 5$, $B6 = 3A6^2 - 2A6 + 5$ etc..)
- In a separate column, find the slope between two consecutive points
- Graph the values of the A column (as x) versus column B (as y). use the appropriate chart type
- Label axes as x-axis and y-axis, include a title, remove the legend and include vertical gridlines.

PROBLEM TWO:

- Graph the function $y = \sin(x)$ for values of x from 0 to 2π (in increments of 0.06 rad)
- Graph the function $y = 5^x$ on the same graph for the same values of x.
- Include a second y axis for $y = 5^x$ and change it to a logarithm axis
- Apply a 4th order polynomial fit to the $y = 5^x$ function, display equation and r^2 value
- On a separate graph, re-plot $y = 5^x$ for the same values of x, but this time apply a 3th order polynomial.