City University
School of Engineering and Mathematical Sciences
AE1263 - ATS Computing I
2008/2009

Excel Class Test

Construct a table and plot a graph to display distance (s) as a function of time (t) given by the following equation

$$s = \begin{cases} s_0 + v_0 t + \frac{1}{2} a t^2 & s_0 + v_0 t + \frac{1}{2} a t^2 \geq 0 \\ 0 & s_0 + v_0 t + \frac{1}{2} a t^2 < 0 \end{cases}$$

where, s_0, v_0 and a are three constants.

[5 marks] Use Microsoft Equation 3.0 to type the equation on the worksheet

[15 marks] Construct a table to display distance (s) as a function of time (t)

- three cells should be used to store the three constants: s_0, v_0 and a (you may use 10, 0 and -9.81 as the values for s_0, v_0 and a when construct the table)
- t is from 0 to 2 with an increment of 0.2
- Correct cell references should be used, so that the formula entered in one cell can be copied to the rest cells of the table

[10 marks] Use the data in the table to plot distance (s) versus time (t)

- Your name and email address should be shown in the chart title
- The chart should have labels for both x-axis and y-axis
- The scale for x-axis should be between 0 to 2 with the major unit of 0.4
- Colour of the Line and symbols should be set to BLACK

Submission:
Save the Excel file as test_your_name.xls and submit the Excel file to CitySpace before the end of the class test