

1. EULER'S METHOD ASSIGNMENT

The spreadsheet *Eulers.xls* on the website (and eLearn) is set up to use Euler's method to estimate $y(2)$ for the function $y(x)$ satisfying the differential equation

$$y' + 3y = 6x$$

with a starting value $(x, y) = (2, 2)$ and a step size $h = 0.02$.

Modify the spreadsheet to estimate $y(3)$ for $y(x)$ satisfying the equation

$$y' + 12xy = \sqrt{x}$$

with a starting value of $(x, y) = (1, 0)$ and a step size $h = 0.1$.

You should submit your spreadsheet to the drop box associated with this assignment on eLearn (Eulers).