

## Part I Problems

**Problem 1:** Use the Euler method and the step size .1 on the IVP  $y' = x + y^2$ ,  $y(0) = 1$ , to calculate an approximate value for the solution  $y(x)$  when  $x = .1, .2, .3$ . (Make a table.) Is your answer for  $y(.3)$  too high or low?

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18.03SC Differential Equations  
Fall 2011

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