

CMSC/AMSC/MAPL 460 Computational Methods Assignment 7  
Due: Before class on 11/20/2008

1. Do the following problems 7.2, 7.3, 7.12, 7.13
2. Let  $y' = y^2 - 5t$  and let  $y(0) = 1$ . Is the problem stable or unstable at  $t = 0$ ?
3. Apply three steps of the Euler and the modified Euler method, with a step size of 0.1 for the above problem, and compute approximations for  $y(0.1)$ ,  $y(0.2)$  and  $y(0.3)$