

Figure 1: Red indicates the analytical answer and blue curve indicates the numerical answers $\frac{1}{2}$

PURDUE UNIVERSITY · ME 581 NUMERICAL METHODS HOMEWORK Jun Cheng December 3, 2015

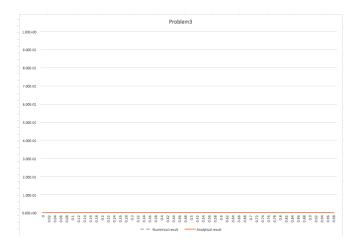


Figure 2: Problem 3 when the initial condition is y = 0

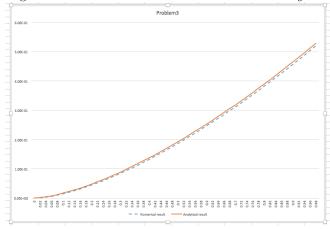


Figure 3: Problem 3 when the initial condition is $y=1.0\times 10^{-6}$