Math 31L Lab Quiz (Euler's Method)

Blake, Fall 1998

Name _____

[15 points] Suppose that y is a function of t, $y(1)=5$, and $\frac{dy}{dt} = ln(1+t^2)$. Use Euler's method with $\Delta t = 0.4$ to approximate $y(3)$. Clearly show all steps, including the y values at each step.

Leonard Euler (1707-1783)