

Assignment 1 for MTH 131: Fall 2006

Due date: Wednesday September 13.

Problems assigned from Logan's text

6). ODE's III

Logan p.11: Problem #4

Find a solution $u = u(t)$ of $u' + 2u = t^2 + 4t + 7$ in the form of a quadratic function of t .

Logan p.11: Problem #7

Show that the one-parameter family of straight lines $u = Ct + f(C)$ is a solution to the differential equation $tu' - u + f(u') = 0$ for any value of the constant C .