

Math 325: Differential Equations

Name: _____

Quiz 2 *Oct. 1, 1997*

1. Solve the initial value problem and sketch the solution.

$$y'''' + y'' = \delta(t - \pi), \quad y(0) = 0, \quad y'(0) = 0, \quad y''(0) = 0, \quad y'''(0) = 0$$

2. Express the solution to the initial value problem

$$y'' + 8y' + 25y = \tan(t), \quad y(0) = 0, \quad y'(0) = 0$$

in terms of a convolution integral.