

Math 325: Differential Equations

Name: _____

Quiz 2 *Sept. 20, 1996*

1. Compute the Laplace transform of the function

$$f(t) = \begin{cases} 1 & 1 \leq t \leq 2 \\ 0 & \text{otherwise} \end{cases}$$

2. Solve the initial value problem using the Laplace transform.

$$y^{(4)} - y'' = \cos(t), \quad y(0) = y'(0) = y''(0) = y'''(0) = 0$$