

MA530. Quiz 5

(1) (#1 p.126) Use the Laplace transform to solve the initial value problem:

$$y' + 4y = 1; y(0) = -3$$

(2) (#31 p.140) Use the Laplace transform to solve the initial value problem:

$$y'' + 4y = f(t); y(0) = 1; y'(0) = 0$$

with

$$f(t) = \begin{cases} 0, & \text{for } 0 \leq t < 4; \\ 3, & \text{for } t \geq 4. \end{cases}$$