

University of Waterloo
MATH 213, Spring 2015
Assignment 6

Question 1

Use the Laplace transform to find the particular solution of the following functions

$$y' + y = \sin(t - 3)u(t - 3) + tu(t - 3) - 3u(t - 3)$$

Where

$$u(t) = \begin{cases} 0 & \text{when } t < 0 \\ 1 & \text{when } t \geq 0 \end{cases}$$

Question 2