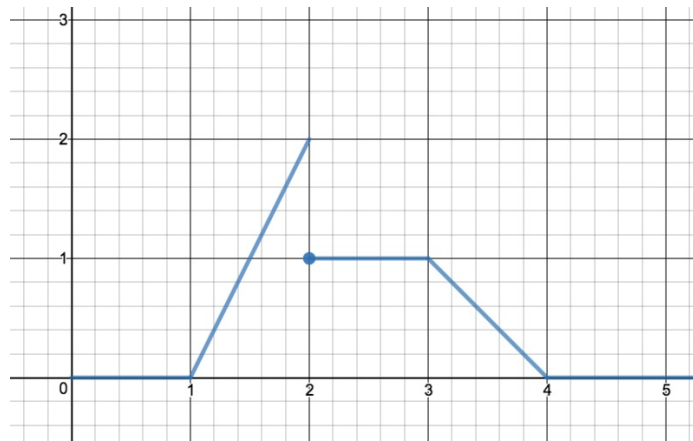


MATH 256-201
Tutorial 7 Worksheet
March 6, 2017

Surname: _____ Given name: _____

Student number: _____

1. Write an expression for the function $f(t)$ shown below using Heaviside functions. In your final answer, all terms should be in the form $u_c(t)g(t - c)$ for some g , such that the Laplace transform is easy to compute.



2. Use Laplace transform to solve the following initial-value problem

$$\begin{cases} y'' + 4y' + 13y = 0 \\ y(0) = 1 \\ y'(0) = 4 \end{cases}$$