# EEE 225 - Engineering Mathematics I (Differential Equations) Homework 9 

$12^{\text {th }}$ Dec, 2022

1. Suppose for the circuit in Figure 1, $I_{d c}=24 \mathrm{~mA}, R=400 \Omega, L=25 \mathrm{mH}$, and $C=25 \mathrm{nF}$. There is no energy stored in the circuit when the switch opens at $t=0$. Find $v(t)$ by using the Laplace transform.


Figure 1: A parallel RLC circuit.

