## ECE 205 — Signals and Systems

Name: Benjamin Feaster Due Date: August 3, 2020, 9:00 AM

Mailbox Number: 939 Assignment: 3

## **Problem 1** Given the following second order circuit:

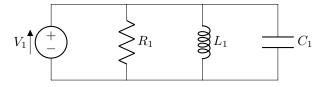
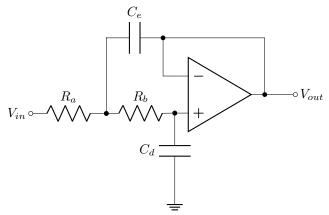


Figure 1



The following questions refer to Figure 1 above:

(a) Find  $V_1$  in terms of  $R_1$ ,  $L_1$ , and  $C_1$ .

$$V_{p1} = \left(\frac{R_1}{R_1 + R_2}\right) V_1 \tag{1}$$