

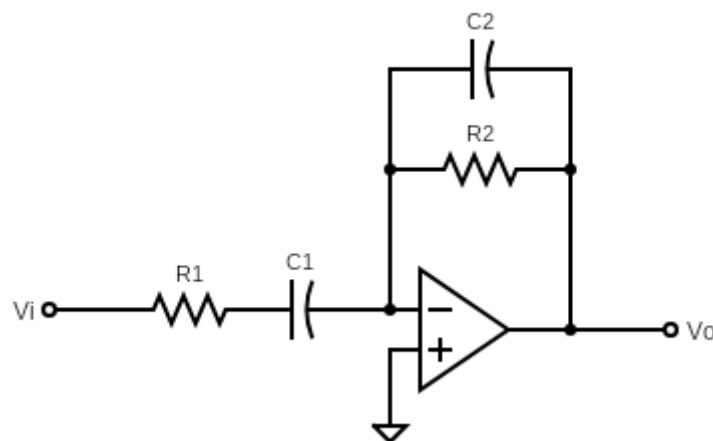
General Notes:

- Show steps clearly.
- Duplicate submissions are not accepted and will result in a zero grade for both the original and the duplicate.
- Late submission policy is that 25% of the grade will be deducted per day.
- Deadline: November 11, 23:59.

Problem 1

Obtain the transfer function $V_o(s)/V_i(s)$ of the op-amp circuit.

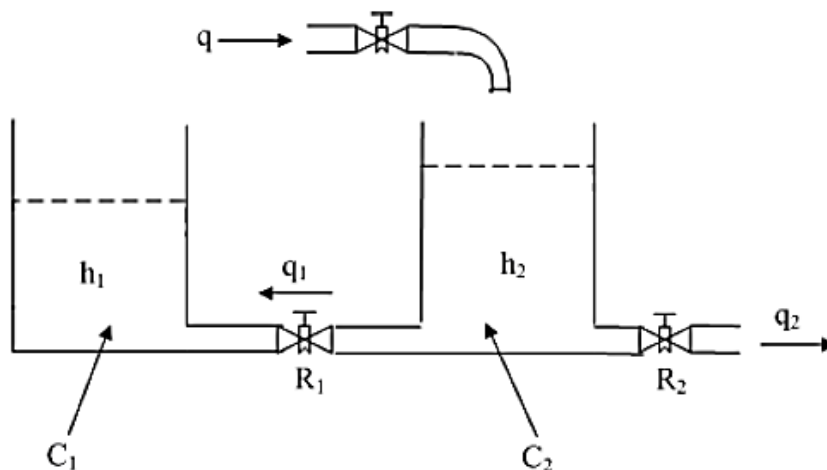
Bonus (1 pt.): Determine the functionality of the circuit.



Problem 2

Consider the liquid level system shown. Derive mathematical models for the system when:

- q is the input and h_2 the output.



Problem 3

Find the Transfer Function of the following system

