

ECE-205 : Dynamical Systems

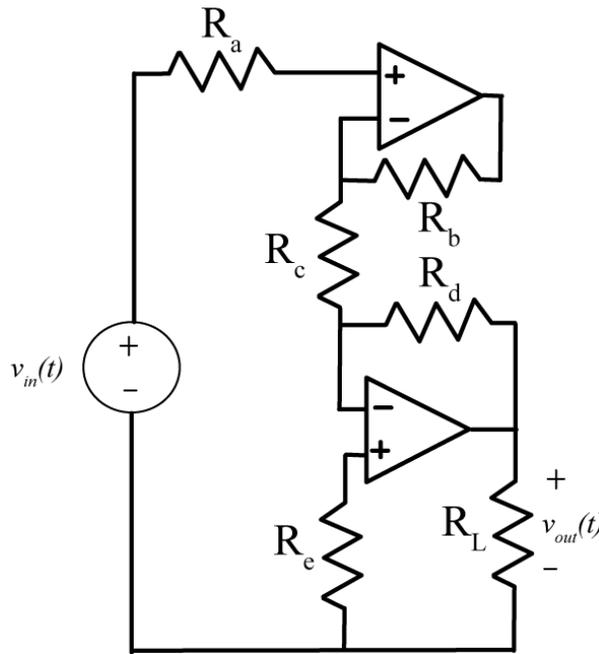
Homework #3

**Due : Friday** December 14 by 5 PM

**Exam 1, Tuesday December 18**

- 1) Problem 3.5 from the Notes
- 2) Problem 3.6 from the Notes

3) For the following circuit, show that  $v_{out}(t) = -\left(\frac{R_d}{R_c}\right)v_{in}(t)$



4) For the following circuit, show that  $v_{out}(t) = -\left(\frac{R_f}{R_e} \frac{R_b}{R_a + R_b} \frac{R_c + R_d}{R_c}\right)v_{in}(t)$

