

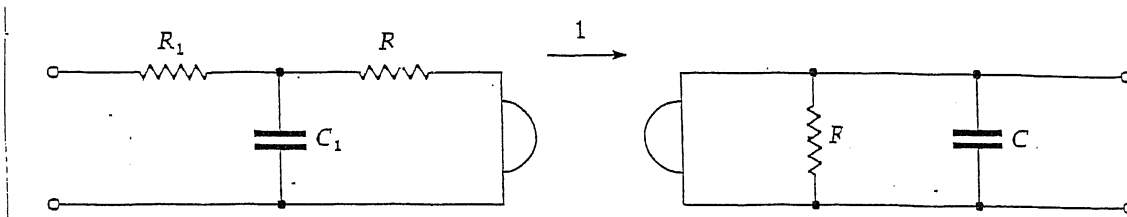
ECE 580

FINAL EXAMINATION

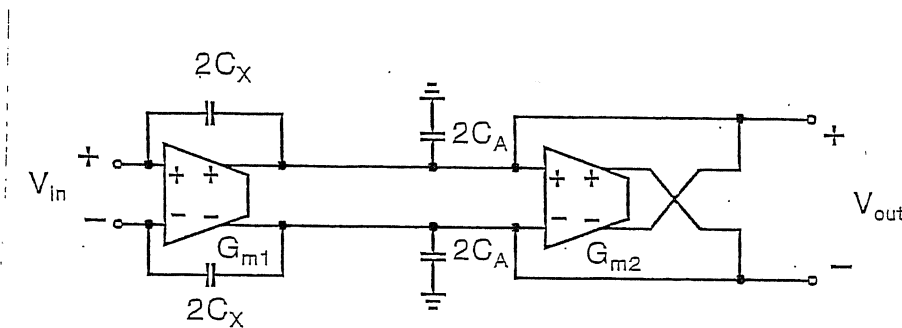
December 5, 2018

2:00 – 3:50 pm

1. In the circuit shown,  $R_1 = 0.5$ ,  $R = C = C_1 = 1$ . Find the voltage gain  $V_{out}/V_{in}$ .



2. Find the voltage gain and input admittance of the circuit shown.



3.a Find  $V_{out}/V_{in}$  for the structure shown.

b. Draw a Gm-C circuit implementing it. (*Note: leave plenty of room for this!*)

