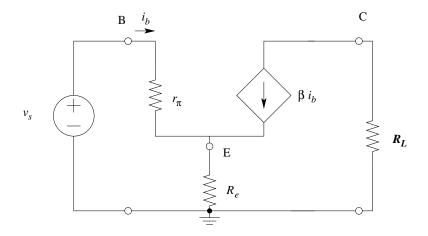
## EE321 - Fall 2002

## Homework 1

Due August 30, 2002

1. Consider the circuit below:



(a) Find the voltage gain,  $v_C/v_B$ .  $v_B$  is the voltage at node B,  $v_C$  is the voltage at node C. The answers should be in terms of the circuit elements  $r_{\pi}$ ,  $R_e$ ,  $\beta$  and  $R_L$ .

(b) Find the input resistance between terminals B and G.