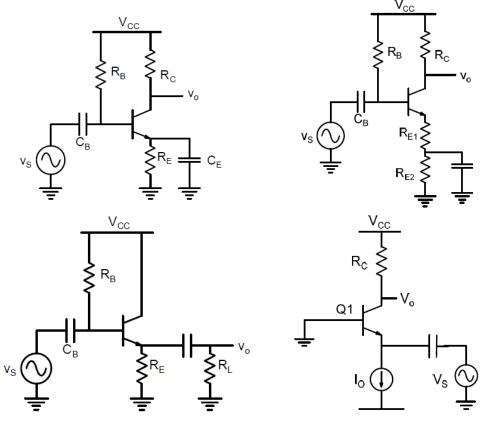
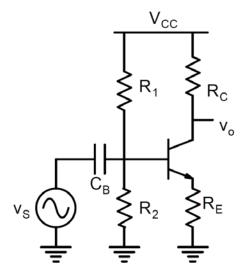
## **EE210: HW-8**

Date: 28.02.2019

**Q1.** Analyze the following circuits from first principles to determine voltage gain and input resistance.  $V_{\text{CC}}$ 



Q2. Check the claim that "it is not possible to design the single stage BJT amplifier shown below such that magnitude of open circuit voltage gain is  $\geq 100$ , input resistance is  $\geq 1 k\Omega$  and the design is such that voltage gain stability against variation in current gain  $\beta$  is better than 5% and supply voltage is less than 12V".



**Q3.** Analyze the following circuit through use of "divide & reuse "methodology.

