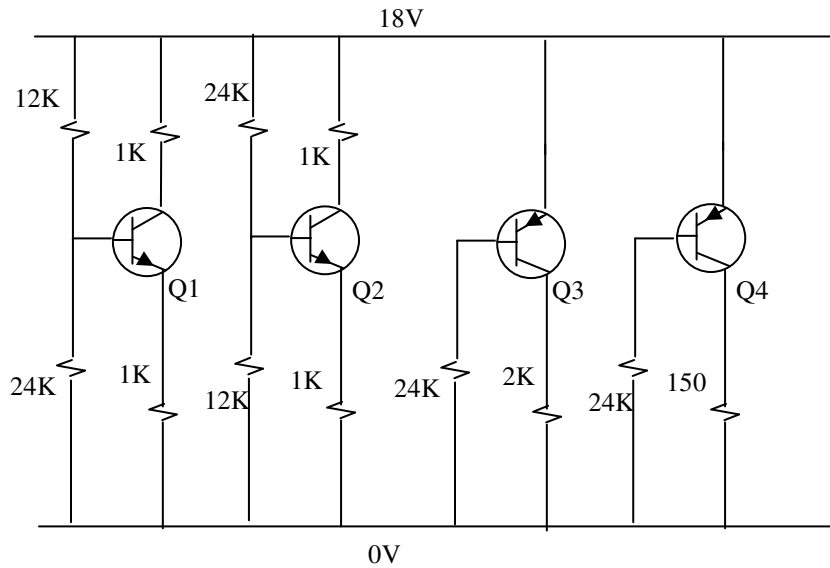


**Electronics II - ELEE 3302**  
**Homework #4**  
**Spring 2009**

**Problem #1 - BJT DC Analysis Practice**

a. Find  $V_E$ ,  $V_B$ ,  $V_C$ ,  $I_E$ ,  $I_B$ ,  $I_C$  for each of Q1, Q2, Q3, Q4 in the circuit below, assuming  $\beta=100$ . (total of 24 answers).

b. Repeat, assuming  $\beta=\infty$  (total of 24 answers).



**Problem #3 - MOSFET DC Analysis Practice**

Assume all the MOSFETs below have  $V_t = 1V$  and  $(1/2)\mu_0 C_{ox}(W/L) = 4 \text{ mA/V}^2$ . For each MOSFET find  $I_D$ ,  $V_D$ ,  $V_G$ , and  $V_S$ . Note that the bottom rail is not ground.

