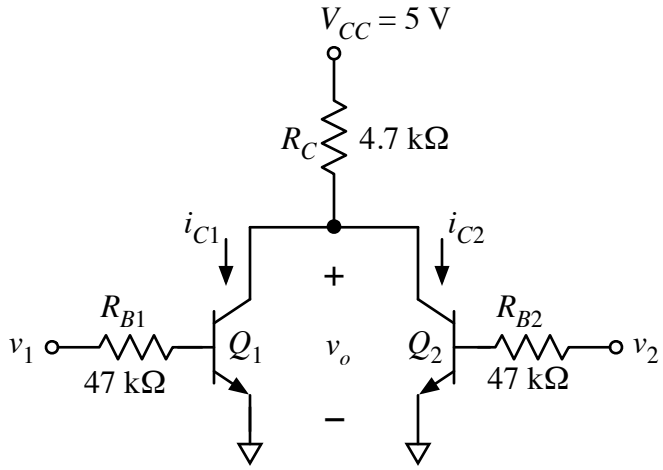
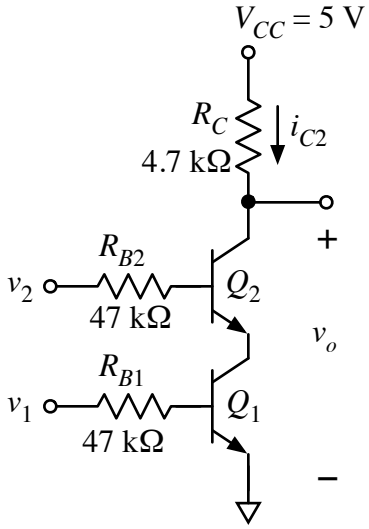
EE 230 — HW 5.13 Name_____

a. For the circuit at right, the input voltages, v_1 and v_2, can be either 0 V or 5 V. Calculate v_o for all four possible combinations of v_1 and v_2. The two BJTs are identical with $\beta_F = 100$. (Don't panic. Make a reasonable guess for BJT modes — off, FA, or sat — and check. Patterns will quickly become evident.)



v_1	0 V	5 V	0 V	5 V
v_2	0 V	0 V	5 V	5 V
v_o				

b. For the circuit at right, the input voltages, v_1 and v_2, can be either 0 V or 5 V. Calculate v_o for all four possible combinations of v_1 and v_2. Same BJTs as part a.



v_1	0 V	5 V	0 V	5 V
v_2	0 V	0 V	5 V	5 V
v_o				

Put your answers — and whatever work will fit — on this sheet. Staple any sheets with additional work behind.