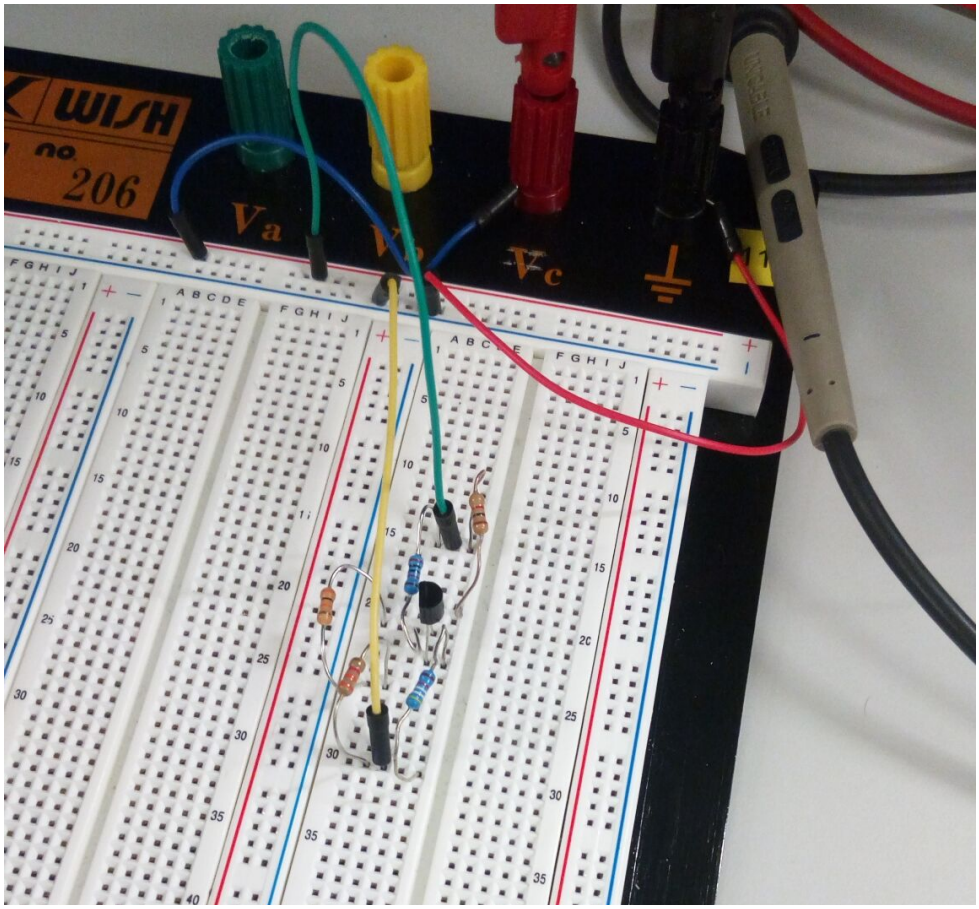
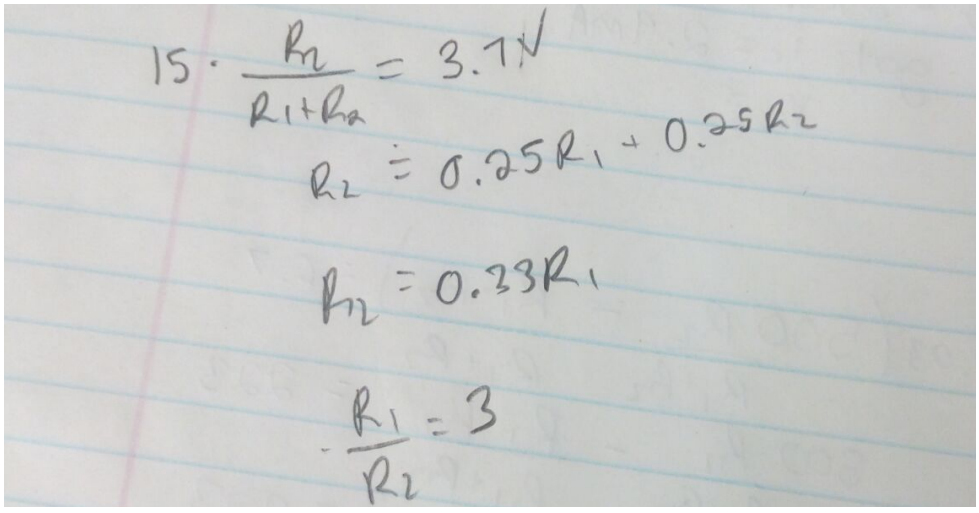
EECS 2210: Lab 3: DC Analysis, BJT circuits Names: Sean O'Brien, Eric Lara, Ato Koomson Session 4

1. We tested the transistor with a multi-meter and found it to be working.
2. We assembled the circuit like so



3. We measured ic to be 0.23mA and Vce to be 0.0016V
4. We did the calculations to determine which resistors to use



We used a 30k and 10k resistors.

5. P = Vce*Ic

   = 6V*3mA = 18mW

Analysis

The pre-lab values implied that the transistor was in saturation instead of active, this was found to be true in the lab. In this lab we learned how the resistors influence the Ic of a bjt, and we learned this through much trial and error. It took us a long time to find a working combination of resistors, but after we found them we learned a lot about the operation of bjts.