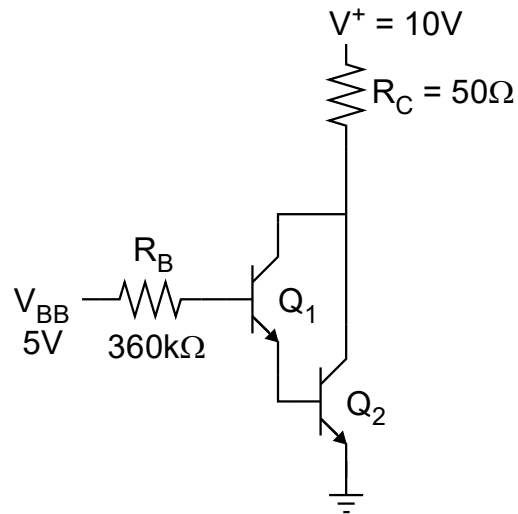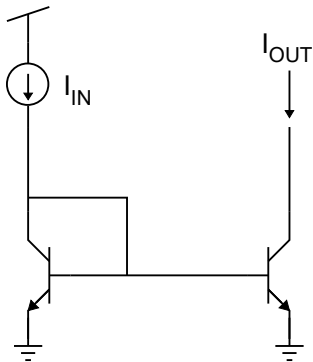# EE 355 Analog Electronics
Homework 8

1. A Darlington pair is used to generate a large current to drive a small resistive load. Determine the current through the load resistance, RC. Also, verify that both transistors operate in forward active mode. Use only the following parameters for this problem.
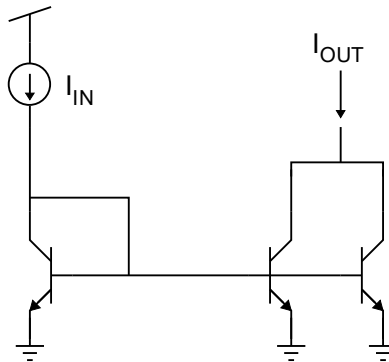
$$\beta=99, V_{BE,ON}=0.7V, V_{CE,SAT}=0.2V$$

2. For each of these current mirrors with an input current of 1mA, determine the output current. Assume all transistors operate in forward active. Use only the following parameters for this problem.
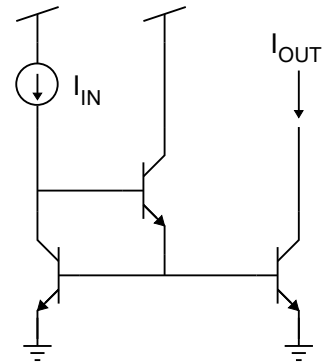
$$\beta=20 \quad V_A=\infty$$

(a)   (b)   (c)