UNIVERSITY OF CALIFORNIA, BERKELEY

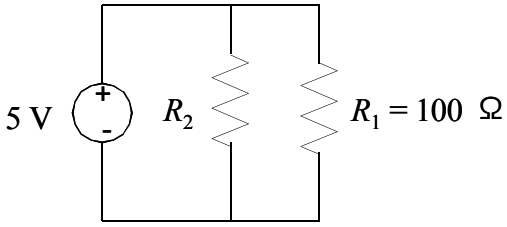
EE40: Introduction to Microelectronic Circuits Lab 1

Introduction to Circuits and Instruments Prelab

Name_____

Session/TA_____

1. Two resistors are connected in parallel to an ideal voltage source of 5 V. Choose the value of R_2 so that the total current going through R_1 and R_2 is 100 mA.



2. The examples given in the chart on page 4 are a 560 kΩ ± 5% 4-band resistor and a 237 □ ± 1% 5-band resistor. Try to verify the values yourself using the steps described there.

3. Derive the equation $R = \dfrac{V_R R_m}{V_{test} - V_R}$ shown in Figure 12 (a).

4. If R_L is 150 Ω, and the signal generator display shows V_{pp} = 1 V, what is the actual peak to peak amplitude of the signal across R_L?