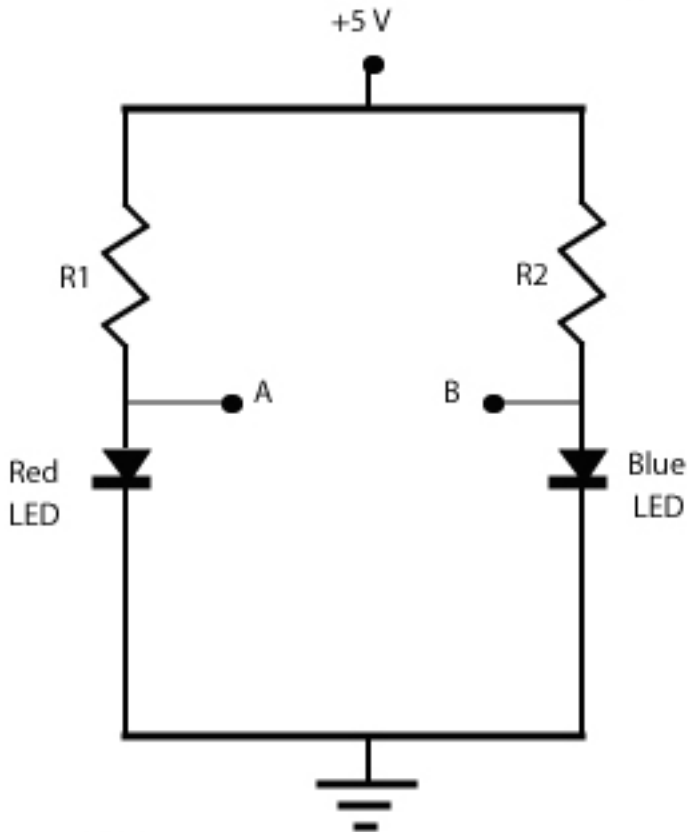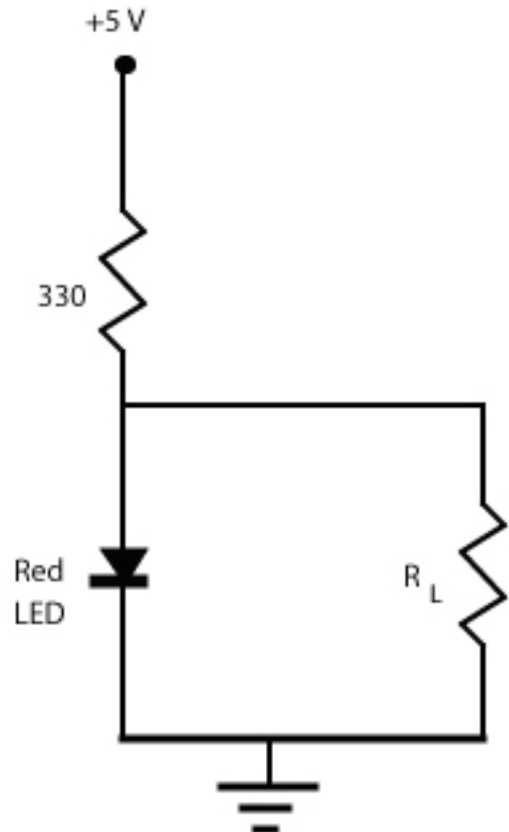# SP.764 Fall 04 - Problem Set 2

Circuit A

Circuit B

Circuit A

Assume that the red LED turns on with a forward voltage of 2.0 V, and that the blue LED turns on with a forward voltage of 4.0 V.

1. Select resistance values for R1 and R2 such that 20 mA flows through each LED.
2. What is the voltage at point A? At point B?

Circuit B

Assume that the red LED turns on with a forward voltage of 2.0 V.

1. What is the minimum value of R_L for which some current still flows through the LED?
2. Assuming that R_L is above that minimum, what is the voltage across R_L? How does it change as R_L is increased above that minimum value?

EC.S06 / EC.S11 Practical Electronics
Fall 2004