

### Special Problem 3.2-3

The circuit below contains two **pn junction diodes**.

The two junction diodes are **identical**.

The ideality factor for both diodes is  $n = 1.0423$ , and the scale current is  $I_s = 10^{-13}$ .

The voltage across the 2K resistor is **2 volts**.

**Without** using diode models (i.e., use junction diode equations), **find the value of resistor R**

