Special Problem 3.2-6

The 650 Ω resistor has 1 mA flowing through it.

The *p-n* junction diode D_1 has an ideality factor of n = 1.0, and a scale current $I_s = 7.55 \times 10^{-14} A$.

The *p-n* junction diode D_2 has an ideality factor of n = 1.0, and a scale current $I_s = 5.11 \times 10^{-15} A$.

- a) Determine the exact values of the voltage across, and the current through, each junction diode. In other words, do not use diode models (e.g., CVD) to analyze this circuit!
- b) Determine also the value of resistor R

