## Special Problem 3.3-5

A junction diode has been replaced in the circuit below with a PWL model.

The PWL model has $r_{d}=10 \Omega$, and the PWL model provides a value $V_{D}$ $=0.64 \mathrm{~V}$ if (and only if) $I_{D}=10 \mathrm{~mA}$.

Determine the approximate junction diode values $V_{D}$ and $I_{D}$ in the circuit below.

Hint: $V_{D} \neq 0.64$, and $V_{D} \neq V_{D 0}$, and $I_{D} \neq 10.0 \mathrm{~mA}$


