Special Problem 3.7 - 3

A voltage of $v_D=0.68$ is placed across a standard $pn$ junction diode with $n=1$.

The drift current flowing across the $pn$ junction is $10^{-6}$ mA.

1. Determine the amount of diffusion current flowing across the $pn$ junction.

2. Determine the value of the drift current if the diode voltage is increased to 0.73 V.

3. Determine the diode current $i_D$ if $v_D = -10.0$ V.