

ENEE 408D
Spring 2003
Homework 1
Due Feb. 6, 2003

Download LASI-6 from the course web site. Do the following problems from the text (Baker, Li and Boyce).

1. 1.1
2. 1.6
3. 1.7
4. In your own words describe qualitatively PN junction operation in: (a) Equilibrium, (b) Forward Bias, (c) Reverse Bias.
5. Derive the expression given in class for the electrostatic potential as a function of position on the p-side of a NP junction.
6. Using the results from class and problem 4 above, derive the expression given in class for the length of the depletion region in equilibrium.