**Primer on Semiconductors: Lecture 3.2 Short Problem**

Mark Lundstrom

Purdue University, Fall 2018

Provide a numerical answer to the question below.

Assuming Si at 300 K, answer the following questions assuming that . You may also assume:









1a) Compute the equilibrium **electron** density per cubic cm.

1b) Compute the equilibrium **hole** density per cubic cm.