

Solid State Physics, Physics 551
Homework Assignment 1, due February 8, 2010

Problem 1. Kittel, Problem 1.1.

Problem 2. Kittel, Problem 1.2.

Problem 3. Kittel, Problem 1.3.

Problem 4. Kittel, Problem 2.1.

Problem 5. Kittel, Problem 2.4.

Problem 6. The packing fraction is the fraction of total volume occupied by the spheres. Calculate packing fraction for the closed packed hexagonal, fcc and bcc structures.