

Phys221 Assignment #2

Due: 10:20am Friday May 15, 2009

Part 1. Textbook (Ulaby, Chapter 3, page 63):

3.1, 3.12, 3.17.

Part 2. Electric charge is uniformly distributed along an arc located in the x - y plane and defined by $r = a$ and $-\frac{\pi}{8} \leq \phi \leq \frac{\pi}{8}$. The linear charge density is ρ_l . Determine the electric field \mathbf{E} at $(0, 0, z)$.