EECS 215: Introduction to Electronic Circuits WN 2010
Problem Set 1

Issued: 1/8/10

Due: 1/15/10, 9:30 AM

U&M refers to a problem from Ulaby and Maharbiz.

Problems:

1. A certain cross sectional area lies in the x-y plane. If $4x10^{20}$ electrons go through this area in 5 seconds in the –z direction and simultaneously $2x10^{20}$ doubly positively charge He nuclei go through the same area in the +z direction, what is the magnitude and direction of the current flowing through the cross section?
2. U&M 1.8 d
3. U&M 1.10b
4. U&M 1.15
5. U&M 1.17
6. U&M 2.3
7. U&M 2.14
8. U&M 2.19
9. U&M 2.25
10. U&M 2.29