## Physics 230

## **Homework Set 9**

**Due Date: Thursday October 15, 2015** 

Do the following textbook problems in the order given

15.3.3, 15.3.4, 15.3.1, 15.3.2

Calculate the integral  $\int dx/(1+\sin^2 x)$  with the limits  $0 - 2\pi$  using the residue theorem. No reference to any other integral should be made in your calculation.

Reading Assignment: (Ch. 15, Legendre Functions)

List of pages: 736 - 739