Physics 230
Homework Set 9

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