Physics 405  Spring 2007

Problem Set #6:  DUE March 9 2007

Read Griffiths Chap. 3.1-3.3

(1) (10 Points) Griffiths, Problem 3.7.

(2) (10 Points) Griffiths, Problem 3.10.

(3) (10 points) Griffiths, Problem 3.12.
   Also, write a Mathematica code equivalent to the hand out “Laplace” distributed on the
   as a supplement to Griffiths's example 3.2, Show that your potential approaches the correct
   boundary condition at x=0, by plotting V[0,y,Ntot] for large and larger values of Ntot.

   In addition, make a 3D surface plot of the potential as in the handout.

(3) (10 points) Griffiths, Problem 3.14.