Problem Set 5
Phy 211 - Fall 2002
Assigned: Thursday, Oct. 10; Due: Friday, Oct. 18
NOTE SPECIAL DUE DATE
Must be handed to me or put in my mailbox by 5 pm.

Problem 1: Particle in an Expanding Box
Shankar, Problem 5.2.1

Problem 2: \( \delta \)-function Bound State
Shankar, Problem 5.2.3

Problem 3: Square Well Potential
Shankar, Problem 5.2.6

Problem 4: 1-D scattering
Shankar, Problem 5.4.2.
For part b) calculate \( T \), the transmission coefficient, for both a repulsive and attractive potential, i.e. \( V_0 \) either positive or negative. For the attractive case, assume \( E > 0 \). At what energies is \( T = 1 \)?