Physics 355 - Problem Set #12, due Nov 28, 2005

1: 4.17

2: 4.18 (I plan to discuss this problem in class on 11/16)

3: 4.21

4: 4.22 (I plan to discuss this problem in class on 11/18)

5: 4.24

6: 4.45

7: 4.46. Also plot the probability for finding the electron at a distance r, (that is $Pr(r)dr = |R_{n,(n-1)}|^2 r^2 dr$) for $n = 1$,2 and 3, and find the location of the maximum of this probability distribution for each n.