ASSIGNMENT 9

CHEMISTRY 305

Due: 4:30 pm Wednesday 8 April 2009

1. Do question 12 on page 226 of your text.

2. Do question 14 on page 227 of your text.

3. Do question 28 on page 228 of your text.

4. (a) Given the information in Table 7.2 of your text for the ground state of Na_2, calculate the Morse parameter a.
   (b) Find the value of $R < R_e$ such that $V(R) = 4D_e$.
   (c) Plot the Morse potential for Na_2 from the value of R found in (b) to $5R_e$.