For Monday 11/26, read Griffiths' section 8.1-8.2 and turn in by 9:30 am:

1. Conceptual: Compare the following equations and comment on the similarities and differences:
    a. 8.3 and 2.149
    b. 8.15 and 2.25
    c. 8.17, 8.10 and 2.150
    d. Based on this, how would you describe the WKB approximation and how it differs from the exact solutions in chapter 2.
2. Easy Math: Write equation 8.16 in terms of Energy by using equation 8.2. Explain how this is used to calculate the Energy.
3. Math: Griffiths 8.1 (except for the comparison to 6.1)
4. Math: Griffiths: 8.3

For Wednesday 11/28, read Griffiths section 6.1 and turn in by 9:30 am:

1. Conceptual: What is the point of λ in equation 6.8?
2. Conceptual: Can we use equation 6.13 to determine wavefunctions for the Helium atom based on a perturbation to a Hydrogen atom? Why or why not?
3. Math: Griffiths 6.1
4. Math: Griffiths 6.4

"For realz" weekly homework due 9:30 am on Friday 11/30 is math problems from 11/26 and 11/28.

For Friday 11/30, read Griffiths' section 6.2 and turn in by 9:30 am:

1. Conceptual: In a two-fold degenerate system, generally the perturbation will break the degeneracy. One state will go to a higher energy and an orthogonal state will go to a lower energy. But, these states may not be the same states used in the unperturbed case. Note that there are an infinite number of wavefunctions with the same energy: $\psi = \alpha\psi_a + \beta\psi_b$, where a and b are the 2 wavefunctions in the unperturbed case. If these happed to be the states with the most extreme new energies, what are α and β?
2. Conceptual: If the states in the unperturbed case are not the good states, what are their energies in the perturbed system? How do they relate to the energies of the "good" states?
3. Math: Griffiths problem 6.7 parts b and c only. Hint: for part c, use equation 6.22.
4. Math: Griffiths problem 6.9