Final-Final Notes

For the Final Exam You will be responsible for the Three Chapters in Zumdahl that we began the course with, and Chapters 20 and 21 (parts there of that we covered) of Engel and Reid.

For studying for the final, consider the following problems (the ones listed from Zumdahl) and the following:

Chapter 20 (or 9 of Engel):
Questions 2, 5, 6, 7, 9;
Problems 1.2, 4 (which single integral gives the orthogonality?), 5, 6, 8, 9, 11 (do in units of Bohr-Radius; and show that the radial probability maximizes at the Bohr Radius), 14; 16, 18 (Use the Virial Theorem), 24.

Chapter 21 (or 10 of Engel)
Questions 1, 4, 5, 7, 9, and 11-17 inclusive (Identify the orbitals from the patterns of nodes and types of nodes)
Problems: 2, 3, 7, 9, 10 (this is a very nice problem with a twist to it), 11, 13