1. Read Griffiths section 7.3 and chapter 8.

2. Work the following problems by Monday, Sept. 7: 8.1, 8.4(a-b), 8.5(a-d), 8.6(a-c).

3. Consider a hollow circular solenoid having N turns, with length, L, and radius, R. The inductor is to be "charged up" by increasing the current from 0 to I.
   a. Using the elementary result that the power is the EMF times the current, what is the power delivered to the solenoid when the current is I and the change in current is dI/dt?
   b. What is the magnetic field in the solenoid when the current is I?
   c. From Faraday's Law find the electric field tangent to the solenoid when the change in the current is dI/dt.
   d. Calculate the Poynting vector and show that the total power delivered to the solenoid as determined from the Poynting vector is the same as given in part a.