Read the following sections of the handouts:

Part 7-8 (to Page 209)

Problem Sheet – Q19-24

Tips for Q19

If you have trouble with Q19, start with the first question in Q20 and think about the following questions.

1. *What is the self-inductance of a solenoid of length l and n turns per unit length?*
2. *What is the self-inductance of a circular conductor, e.g., a solenoid with only 1 turn?*
3. *Instead of a circular loop, think of a rectangle loop with current I? The width of the rectangle is $2d$. The length of the rectangle is l, which is much longer than d.*