

6-3)

Measurements on a solenoid coil (inductor) at a particular instant in time indicate that the current in the inductor is 2.7 A and changing at 0.4 A/s, while the *emf* generated across the coil is 1.6 V.

- A) What is the inductance L of the coil?
- B) If the body of the coil is 1 inch long and $\frac{1}{4}$ inch in diameter, how many turns are there in the coil?