Nombre: \_\_\_\_\_ Sección: \_\_\_\_\_

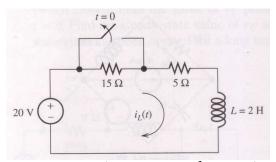


Figure 1: First order circuit with an inductor

**P1** Determine an expression for the current  $i_L(t)$  for t > 0 and draw a sketch of the function to scale versus time in the transient region.

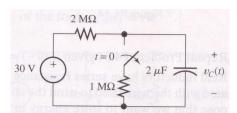


Figure 2: First order circuit with a capacitor

**P2** Determine an expression for the voltage  $v_c(t)$  for t > 0 and draw a sketch of the function to scale versus time in the transient region.

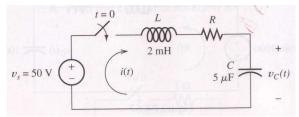


Figure 3: Second order circuit

**P3** Determine an expression for the voltage  $v_C(t)$  for t > 0 and draw a sketch of the function to scale versus time in the transient region for R = 80 Ω and 20 Ω.