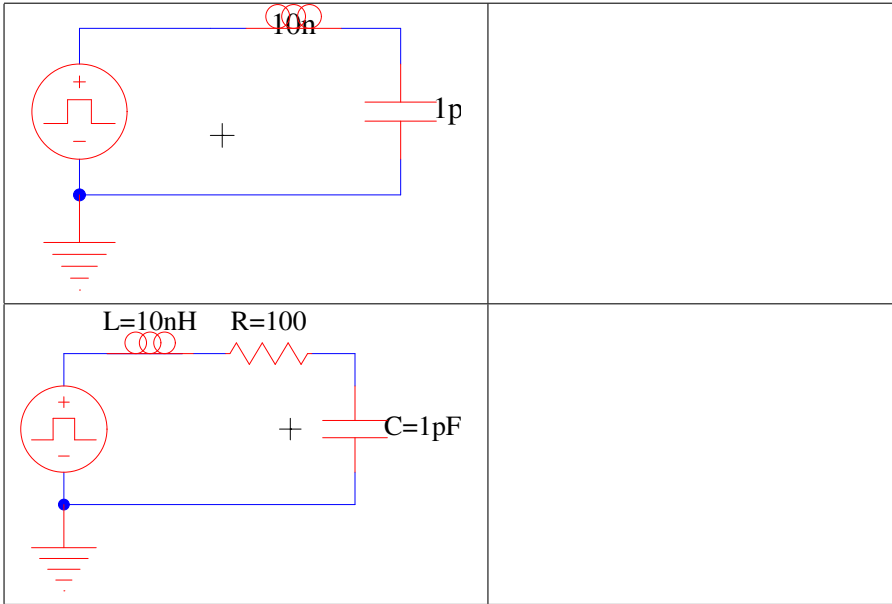


1. What is the step response (voltage on top plate of capacitor)?



2. Inductance of a PCB Trace over a ground plane: $L \approx l \left(\frac{\mu_0 \mu_r h}{w} \right)$

- Height above ground plane: $h = 3\text{mil}$ (1 mil = 0.001 inches)
- Width of trace: $w = 5\text{mil}$
- $\mu_0 \approx 1.26 \times 10^{-6} \text{ H/m}$
- $\mu_r \approx 1.0$

Per centimeter of PCB trace, how much inductance?

3. Where do inductances arise in our systems?
