Problem 1.

For dc operation determine the energy stored in the 0.1F capacitor

![Circuit Diagram 1](image.png)

Problem 2.

Under dc conditions calculate the current $i$ and the voltage $v$ for the following circuit

![Circuit Diagram 2](image.png)

Problem 3.

The voltage across a 5 mH inductor is $5\left(1 - \exp\left[-5t\right]\right)$ Volts. Calculate the current through the inductor and the energy stored in the inductor at time $t=2$ sec.
Problem 4.

A device outputs the square wave current waveform shown below on Figure 4(a). It is desired to obtain the triangular voltage waveform shown on Figure 4(b).

What device/element would you use and what are its characteristics including its initial state?

Problem 5.
Determine the Thevenin and the Norton equivalent circuits seen through ports a-b of the following networks.