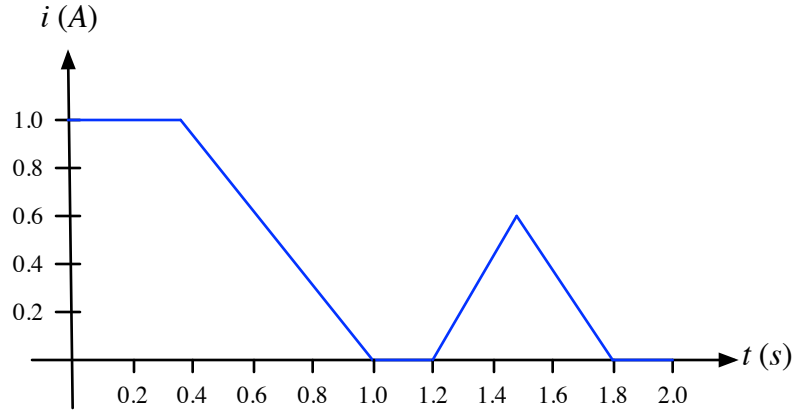
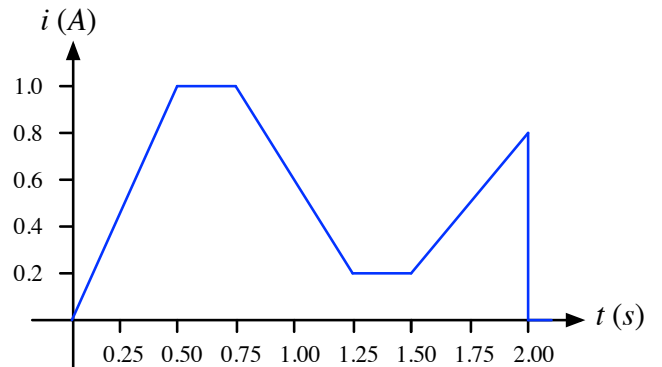
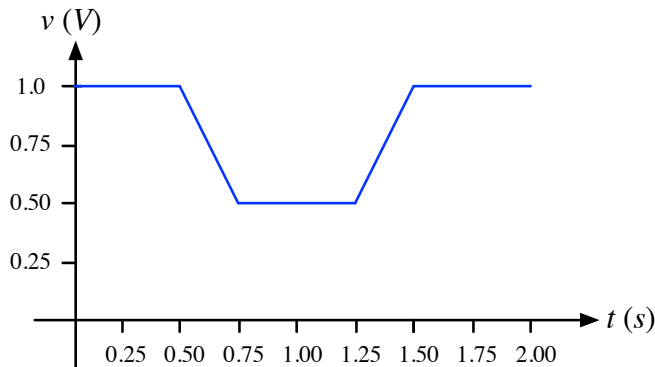


- a) A battery is providing a constant 12 V at the output. The current from the battery is varying with time as shown at right. Calculate the total energy produced by the battery in the interval from 0 to 2 s.



$E =$  \_\_\_\_\_

- b) The voltage across some electrical device and the current through it are shown as functions of time in the graphs below.. Make a quantitative graph of the power being dissipated in the device. Then calculate the total energy dissipated in the interval from 0 to 2 s.



$E$  between  $t = 0$  and  $t = 2$  s = \_\_\_\_\_