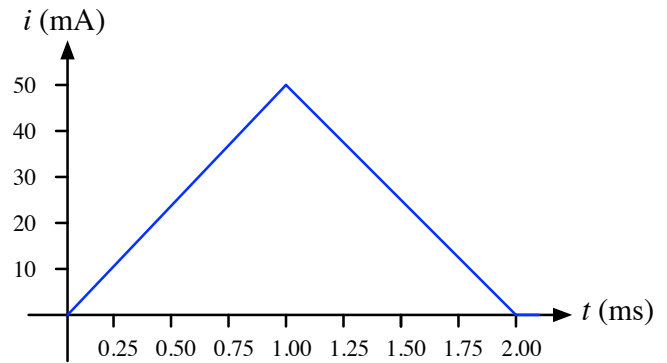
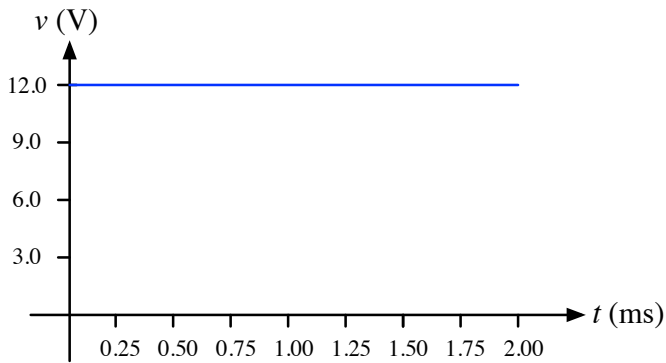
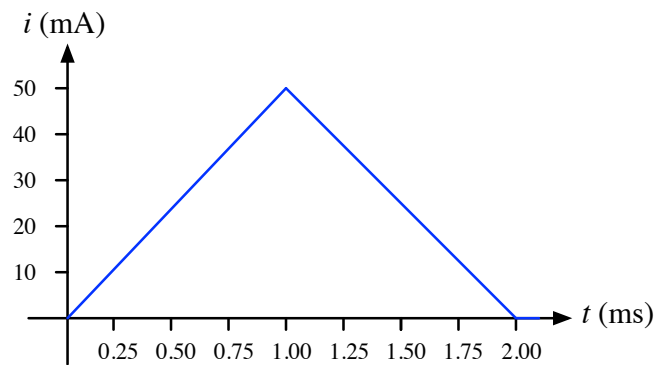
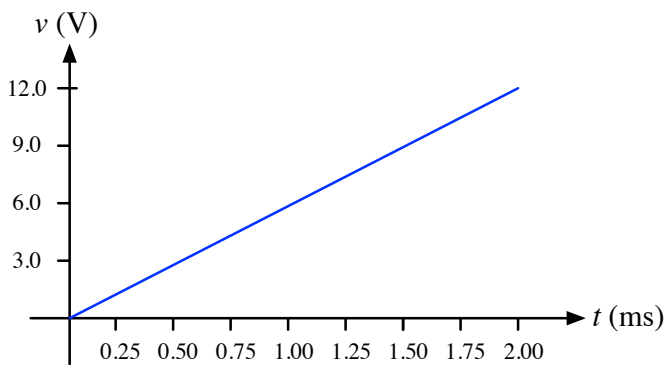


The voltage across some electrical component and the current through it are shown as functions of time in the graphs below. Calculate the total charge transferred between 0 and 2 ms. Then calculate the total energy dissipated in the interval from 0 to 2 ms.



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

Calculate the energy transfer if the voltage is changing linearly, as shown below.



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