11 The variation with time t of the sinusoidal current I in a resistor of resistance $450\,\Omega$ is shown in Fig. 11.1.
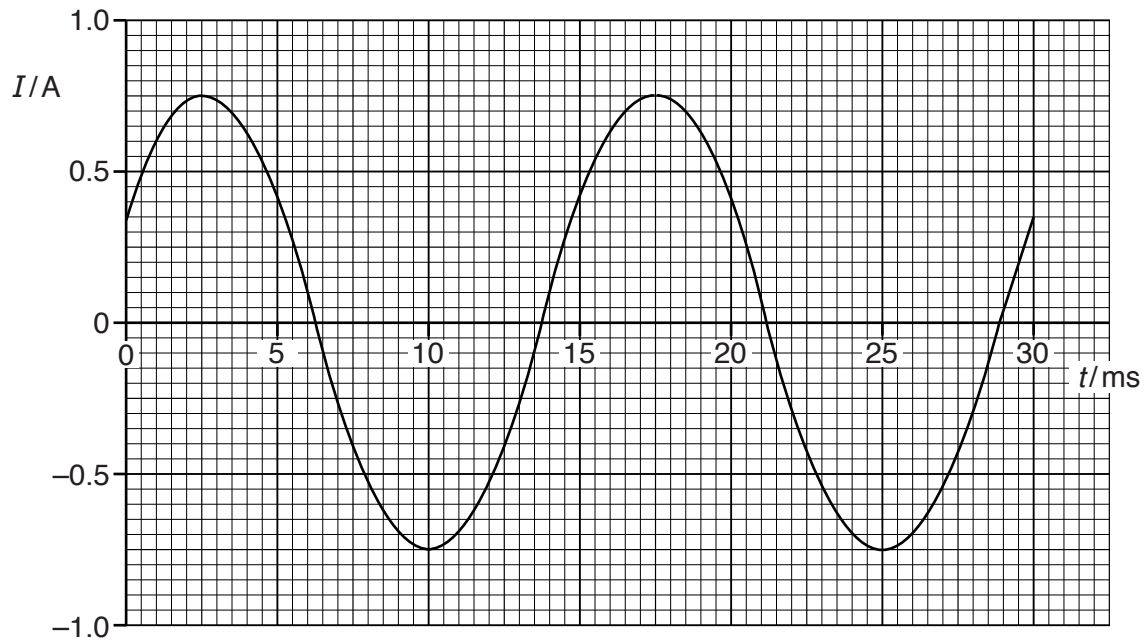

Fig. 11.1

Use data from Fig. 11.1 to determine, for the time $t = 0$ to $t = 30\,\text{ms}$,

(a) the frequency of the current,

frequency = ... Hz [2]

(b) the mean current,

mean current = ... A [1]

(c) the root-mean-square (r.m.s.) current,

r.m.s. current = ... A [2]

(d) the energy dissipated by the resistor.

energy = ...J [2]

[Total: 7]