

Chapter 11, Problem 45.

The voltage across a load and the current through it are given by

$$v(t) = 20 + 60 \cos 100t \text{ V}$$

$$i(t) = 1 - 0.5 \sin 100t \text{ A}$$

Find: (a) the rms values of the voltage and of the current

(b) the average power dissipated in the load.