

ECET341 Homework 3

- (1) For the circuit shown in Fig.1, the voltage source is given by  $v = 20\cos(2000t)$  (V). Find
- (a) the average power delivered to the load.
  - (b) the reactive power delivered to the load.
  - (c) the power factor of the load.
  - (d) the reactive factor of the load.
  - (e) the peak value of the instantaneous power delivered by the source.

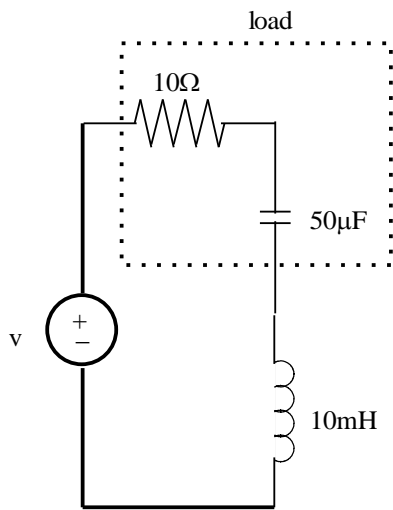


Fig.1

- (2) Find the average power, the reactive power, and the apparent power absorbed by the load in the circuit shown in Fig.2 if  $i = 20\cos(100t)$  (A).

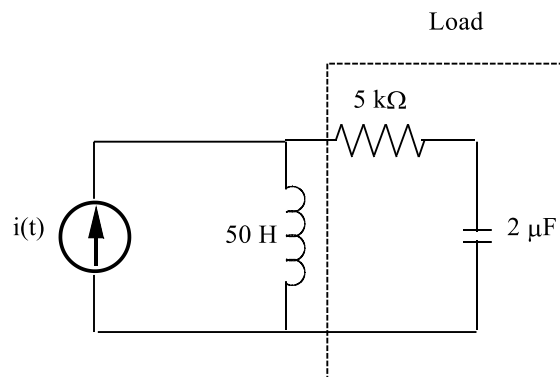


Fig.2