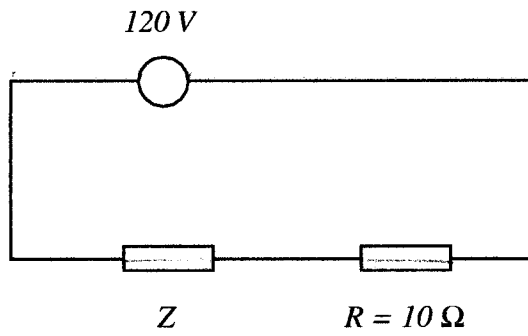


1. For the circuit given in FIGURE 1 the power factor is 0.72 lagging and the power dissipated is 375 W.



0.72 lagging  
375 W

FIG. 1

Determine the:

- (i) apparent power
- (ii) reactive power
- (iii) the magnitude of the current flowing in the circuit
- (iv) the value of the impedance  $Z$  and state whether circuit is inductive or capacitive.