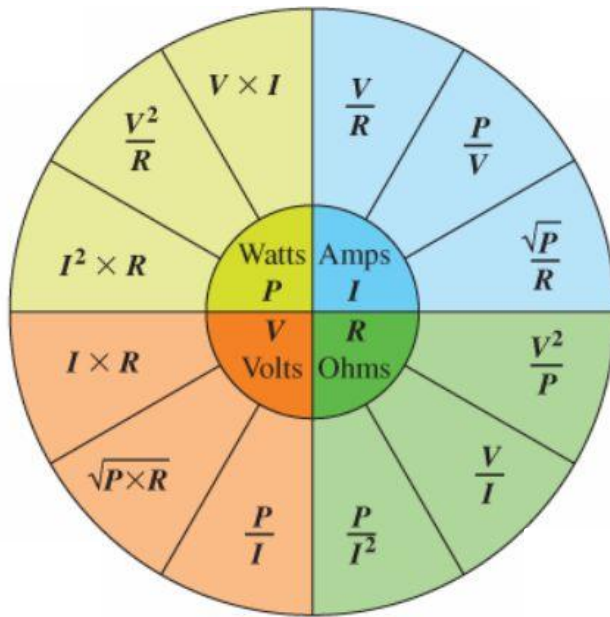


Chapter 10 Problems part 1

Please turn in problems on a separate sheet of paper, & show your work.



26. A red light bulb draws a current of 2 amps when connected to a wall outlet (120 V).
What is the R "resistance" Ω and Power wattage of the bulb?
27. What is the cost of running a pink : 1500-**W** hair dryer for 30 **minutes**, when the co\$ of electricity is: \$ 0.12/kWh?
(Power) (t) (cost per/kWh)
28. A 12-V battery is connected **across** a device whose **R** resistance is 24 Ω .
a. Calculate the **I** current in the wire.
b. What is the **P** power dissipated by this load?
29. How much **I** current is drawn by a 1000-**W** electric skillet for cooking snake meat operating on ΔV of 120 V ?
I =
30. With a: 1200-W brave little toaster, how much electrical energy is needed to make a slice of toast when (cooking time = 5 minutes)? At : \$.08/kWh, how much does this slice cost?
(P) (t) (cost of electricity/kWh)
35. A 50- Ω R is connected across 120 V.
How much heat is dissipated in the resistor?
P =