Name _____ Hour _____

Electricity Problems-

Problem 1 How much current is drawn by a coffee pot with a resistance of 35 Ohms? *(ans. 3.4 A, You know ΔV.)*

Problem 2 Calculate the resistance of a TV with a power of 700 W. *(Hint- Find I first, then find R. ans. 20.6 Ω)*

Problem 3 If all of your household electrical appliances do 922.65 kWh of electrical work in one month, how many Joules is that? *(ans. 3,321,540,000 J, This is just a conversion.* ***Remember: 1 Joule= 1 Watt-second.*** *See your notes.)*

Problem 4 How much would it cost to run a PlayStation 4 for 3 hours. They have a power of 137 Watts.
(≈ $0.04 or 4 cents)

Problem 5 Calculate the cost to run a microwave that uses 12 A of current for 10 minutes. *(≈ $0.024 or 2.4 cents)*

Problem 6 You run the Electricity at home lab and find that it takes 95 sec for the disc to spin once when you are powered down.

a. If your Kh is 7.2 (That is your work!), what is the power your house is running at in KW? (0.273 kW)

b. If you were to continue at that rate of power for 24 hours, how much would it cost? ($0.64 or 64 cents)