Practice for all formulas

Give the unit and symbol for the following:

Give the unit and sym		
	Unit (s)	Symbol
Current intensity	A	I
Potential difference	V	\checkmark
Voltage	V	\checkmark
Resistance	N	R
Power	W/KW	P
Energy	5/K5/KWh	E
Time	S	t

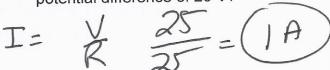
In the table below fill in the appropriate triangle(s) used for each unknown.

Voltage	Power	Energy - 2 formulas
RII	PIV	P It INE

How would you conve	ert the following tir	me units:	
Minutes to seconds_		W to kW	- 1000
	1000	J to kWh_	-3 600 000
Seconds to hours :	3600	Seconds t	o minutes 🗦 60
Hours to seconds X			

Using the above formulas and conversions, solve the following problems. Show all work.

1. What is the current intensity of a circuit with a resistance of 25 Ω and a potential difference of 25 V?



	at is the res ential differe		a circuit with a current intensity of 4 A and a V?
R=	三人	50	= (12.52)
			Land 200 V and 25 A2

3. What is the power in kW when a dishwasher used 200 V and 2.5 A?

4. A radio is on for 3 hours and has 400 W of power. What is the energy in

5. How much time elapsed in hours if a TV used 550 000 J of energy and needs 400 W of power?

$$t = \frac{6}{7} = \frac{55000}{400} = \frac{1250}{3000} = 0.38 \text{ Mb}$$

6. A toaster takes 200 seconds to toast a piece of bread. If it uses 100 W of power how much energy will be used in J?

7. A hairdryer is used for 30 minutes a day 5 days a week. It uses 220 V and 3.5 A. Calculate the energy used in J for the five days?

3.5 A. Calculate the energy used in J for the five days?

$$6 = \text{IV} + 3.5 \times 220 \times 30 \times 60 \times 5 = 6930 000\text{J}$$

8. How much energy in J does a computer use if it is on for 2 hours and uses 220 V and 2.0 A.

9. If a TV used 700 000 J of energy and 100 W of power. How many hours did you watch TV for?

