Answer on Question #62687, Physics / Mechanics | Relativity

- 8. Determine the number of kilowatt-hours (kWh) for each of the following energy consumption
- a. 2500 W for 2h
- b. 100,000 W for 5h

Solution:

$$Power = \frac{Energy}{Time}$$

or

$$Energy = Power \times Duration of Usage (Time)$$

a)
$$Energy = 2500 \text{ W} \times 2 \text{ h} = 5000 \text{ Wh} = 5 \text{ kWh}$$

b)
$$Energy = 100,000 \text{ W} \times 5 \text{ h} = 500,000 \text{ Wh} = 500 \text{ kWh}$$

Answer: a. 5 kWh; b.

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