

Exercice 6

$$4h15min = 4h + 1/4h = 4h + 0,25h = 4,25h$$

1. $4,25 \times 1h = 4,25 \times (60min \times 60s)$

$$= 4,25 \times 3600s = 15300 \text{ s}$$

2. *Attention aux unités !!!*

$$E = P \times \Delta t = 100(W) \times 4,25 \times 3600(s) = 1530000 \text{ J} \\ (= 1530 \text{ kJ} = 1,53 \text{ MJ})$$

3. $E = P \times \Delta t = 100(W) \times 4,25(h) = 425 \text{ Wh}$

$$= 0,100(kW) \times 4,25(h) = 0,425 \text{ kWh}$$

Exercice 7

$$1h30min = 1h + 1/2h = 1h + 0,5h = 1,5h$$

Attention aux unités !!!

1. $E = P \times \Delta t = 1200(W) \times 1,5(h)$

$$= 1200/1000(kW) \times 1,5(h)$$

$$= 1,2(kW) \times 1,5(h)$$

$$= 1,8 \text{ kWh} (= 1800 \text{ Wh})$$

2. **Cela coûte $1,8 \text{ kWh} \times 10 \text{ cts/kWh} = 18 \text{ cts}$ par semaine et $18 \text{ cts} \times 52 \text{ semaines} = 936 \text{ cts} = 9,36 \text{ euros}$**