

### Exercici 3

a)

$$W = M \cdot g \cdot h = 4900 \cdot 9,807 \cdot 544 = 26,14 \text{ MJ}$$

b)

$$P_{\text{subm}} = \frac{W}{t} = \frac{26,14 \times 10^3}{5 \cdot 60} = 87,14 \text{ kW}$$

c)

$$\eta = \frac{P_{\text{subm}}}{P_{\text{cons}}} = \frac{87,14}{115} = 75,77 \%$$

d)

$$E_{\text{cons}} = P_{\text{cons}} t = 115 \cdot \frac{9 \cdot 60}{15} \cdot \frac{5}{60} = 345 \text{ kWh}$$

$$c = 30 c_e E_{\text{cons}} = 2173,5 \text{ €}$$