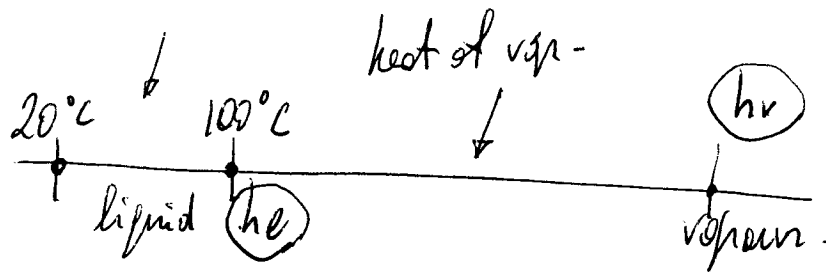


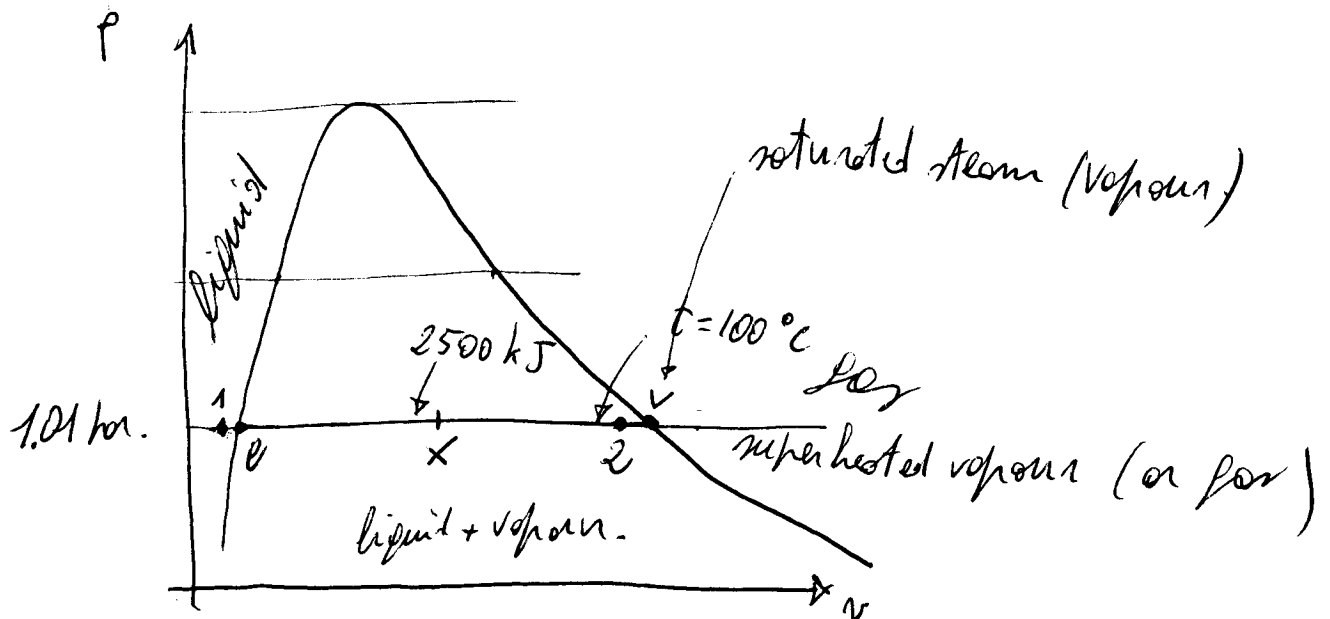
h enthalpy

$$P = 1 \text{ bar}$$



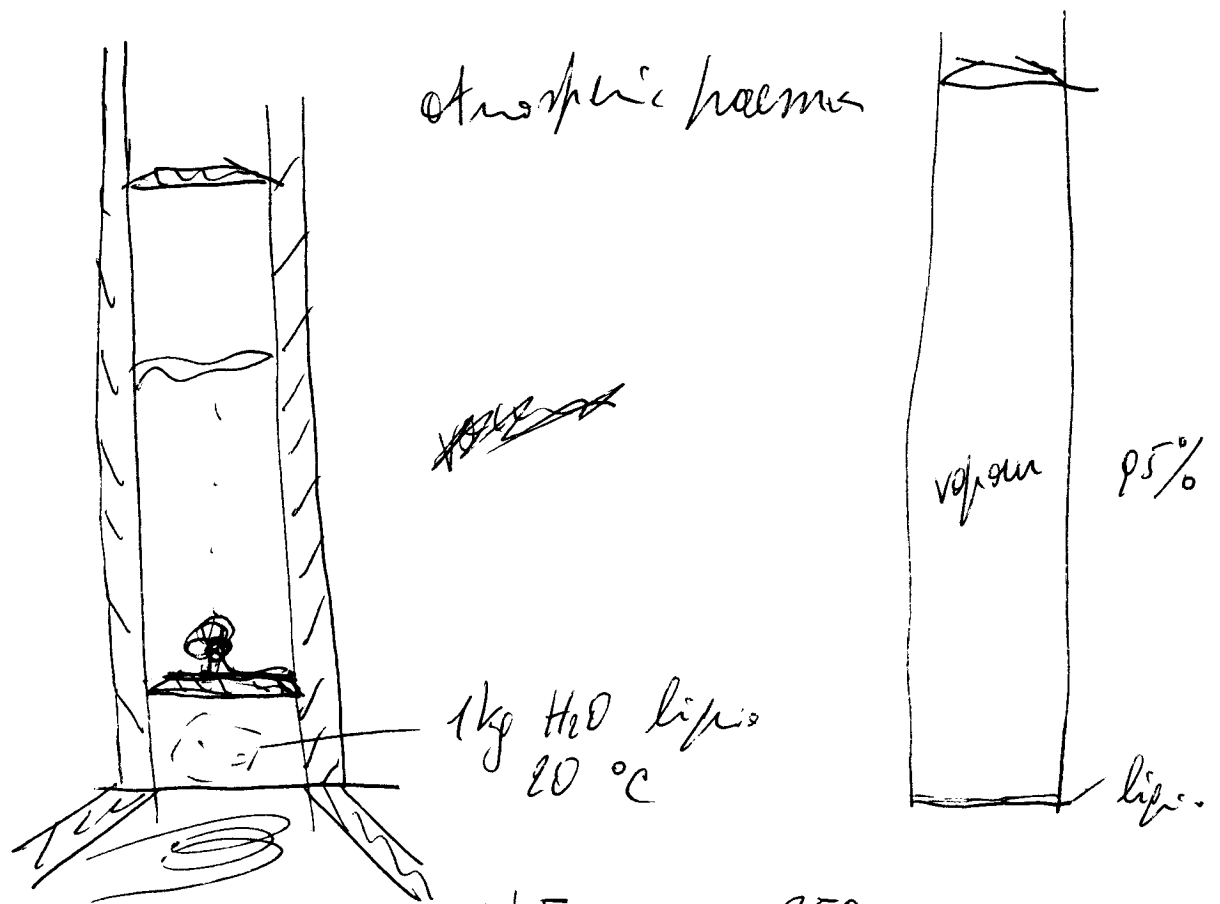
$$c_p = 4.18 \frac{\text{kJ}}{\text{kg K}}$$

1 kg water. $Q = m \cdot c_p \cdot (t_2 - t_1) = 1 \times 4.18 \times 80 \approx \underline{334 \text{ kJ}}$



$$x = \frac{m_v}{m} \quad \text{vapour mass fraction.}$$

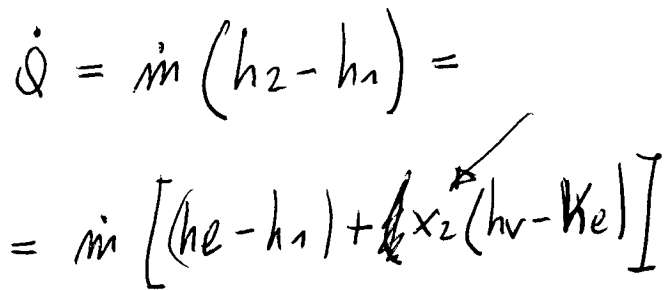
Q



$$h_2 - h_1 = q_{12} = \underbrace{h_e - h_1}_{334 \text{ kJ}} + \underbrace{x_2 (h_v - h_e)}_{0.95 \cdot 2500 = 2375 \text{ kJ}} = 2709 \text{ kJ}$$

=

2



$$= m [(h\nu - h\nu_1) + x_2 (h\nu - h\nu_2)]$$