Frame of Reference

$$\frac{1}{r^2}$$

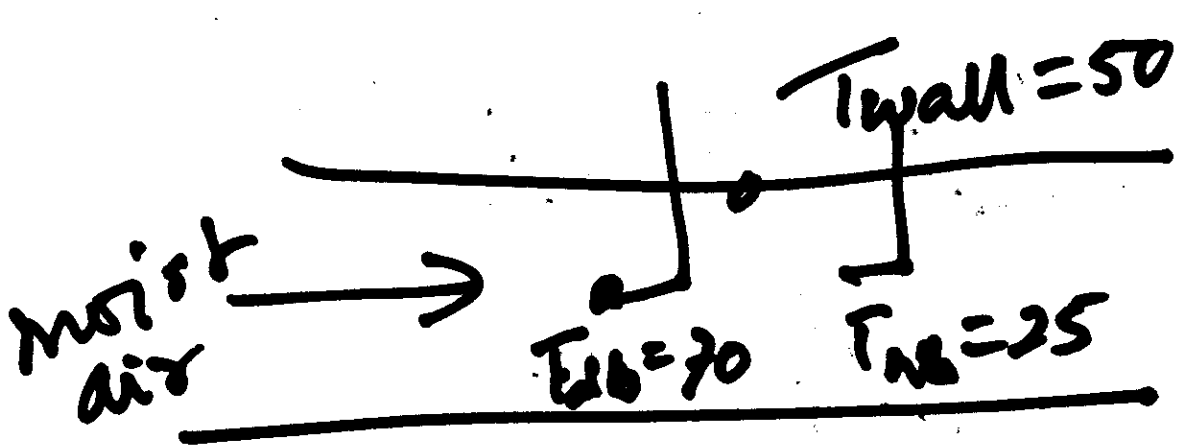
$\vec{F} = ??$ Frame independent

$$c = \frac{1}{\sqrt{\epsilon_0 \mu_0}}$$

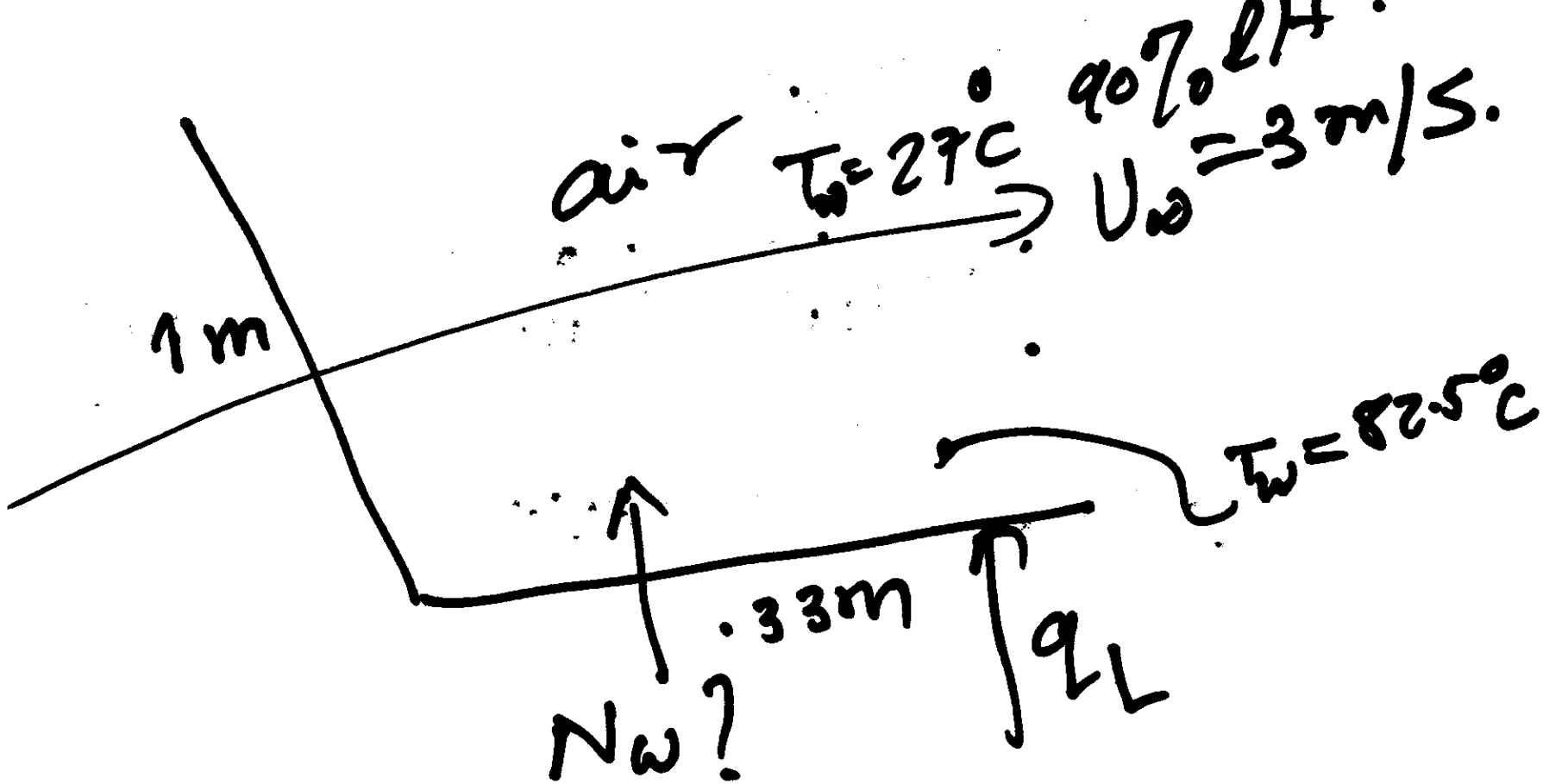
$T_W = 15^\circ C$. $P_{sat}(15)$ from steam tables:

$$W = .622 \frac{P_{sat}}{P_{tot} - P_{sat}}.$$

$$w = \frac{W}{1 + W}$$



$$h_{conf, vw=0} = 17.5 \frac{W}{m^2 \_ K}.$$


air
$T_\infty = 27°C$
90% RH
$U_\infty = 3 m/s$.
1 m
$T_w = 82.5°C$
.33m
N_w?
q_L

$$\rho_w \cdot \frac{\Delta h A_{leak}}{\Delta t} = \dot{m}_w$$

$$\rho_w \cdot \frac{\Delta h}{\Delta t} = \frac{\dot{m}_w}{A_{leak}} = N_w \cdot$$

$$1000 \times \frac{0.01}{\Delta t} \cdot = .7324$$

$$\Delta t = \frac{.7324}{10}$$

$$= .07324$$

$$\Delta t = \frac{1000 \times .01}{.7324} = 13.65 \text{ hrs}$$