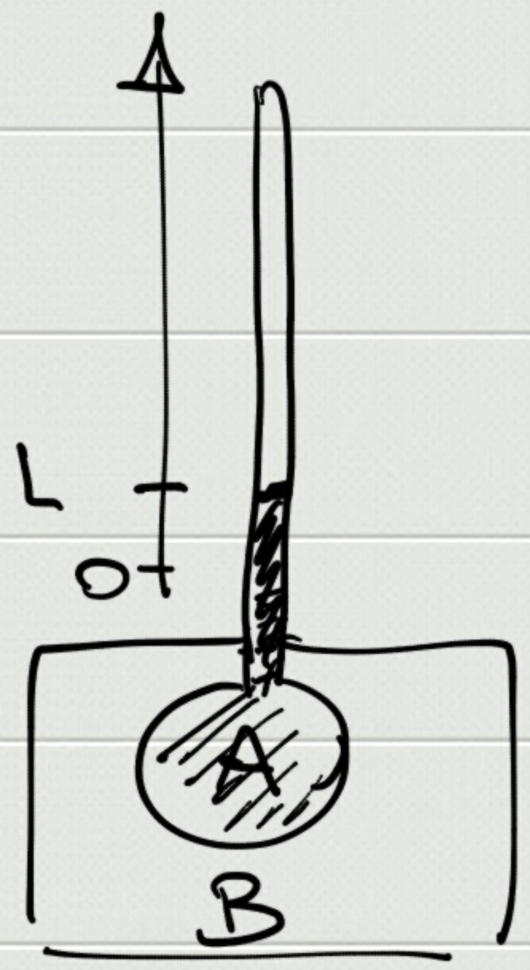
equilibrio termico ⇒ temperatura



termometro : sistema TD

$X = X(t)$

↑ temperatura

caratteristica termometrica

↓ funzione termometrica

$\boxed{t = \Theta(X)}$

$\Theta \rightarrow$ funzione monotona (crescente)

↑ temperatura

fusione ghiaccio : $t = 0 = a L_g + b$

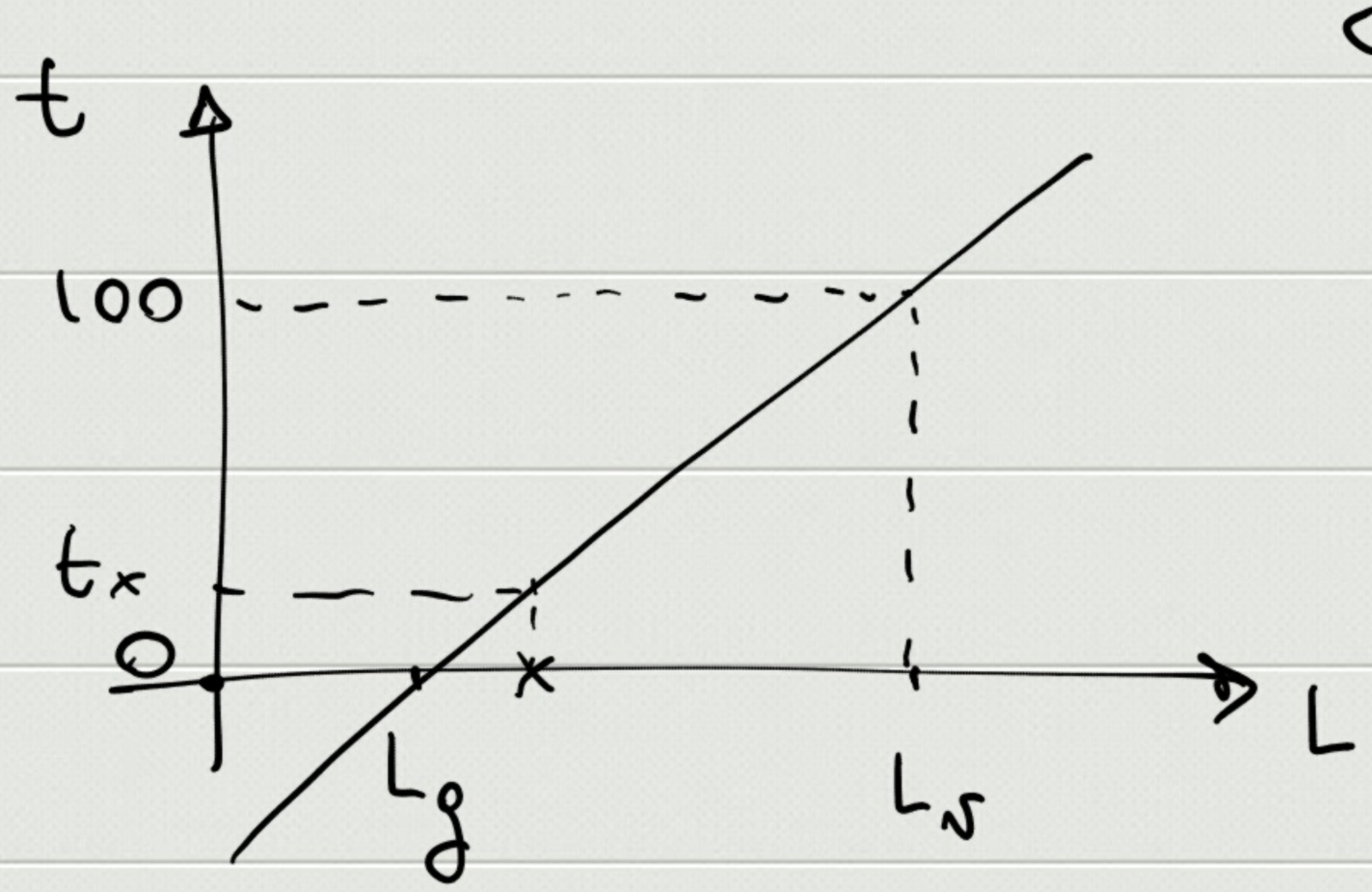
ebollizione acqua : $t = 100 = a L_v + b$

$100 = a(L_v - L_g) \Rightarrow$

$t = \Theta(L) = aL + b$

$$a = \frac{100}{L_v - L_g} \qquad b = -aL_g = -100\,\frac{L_g}{L_v - L_g}$$

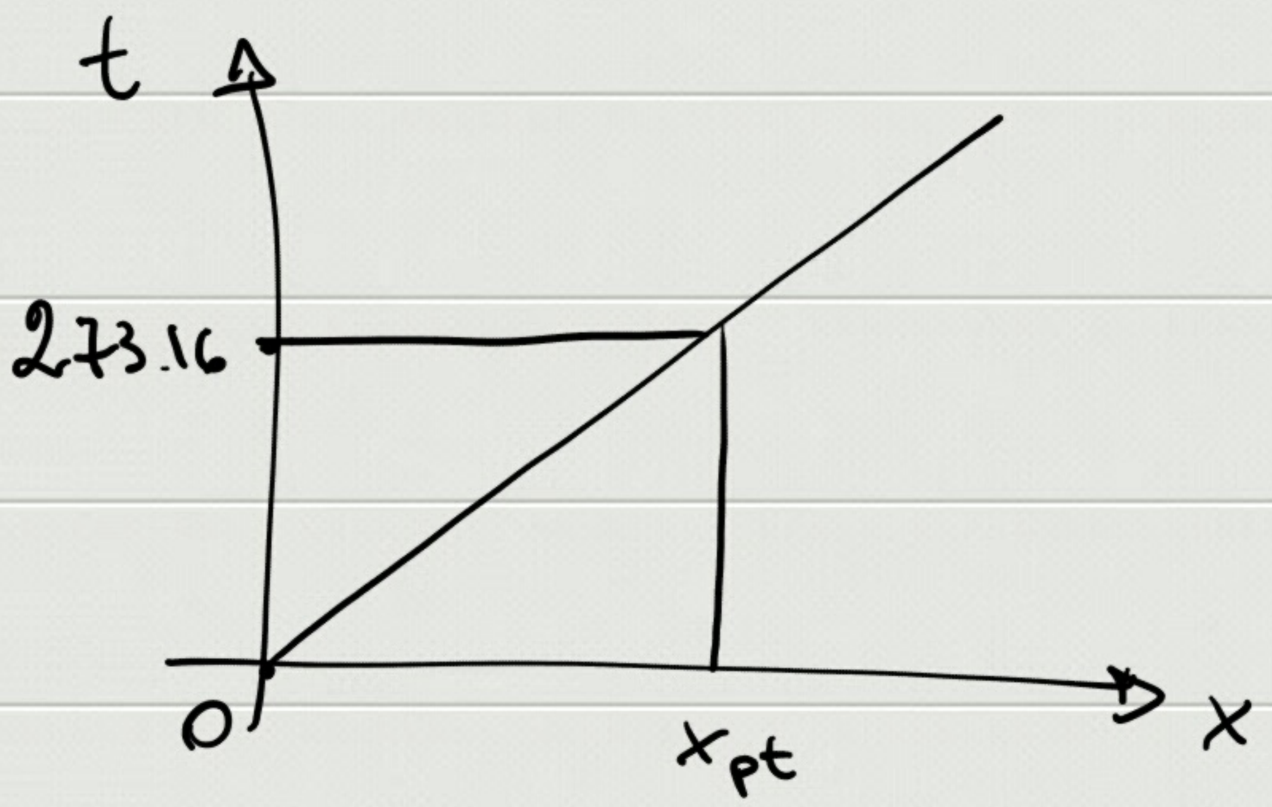
$$\Rightarrow t = \theta(L) = aL + b = 100\,\frac{L - L_g}{L_v - L_g}$$



Scale centigrade : Celsius (°C)

$\Theta(x) = a\,x$ $\qquad$ $t_{pt} = \Theta(x_{pt}) = a\,x_{pt} = 273.16$

$$\Rightarrow a = \frac{273.16}{x_{pt}} \Rightarrow \boxed{t = \Theta(x) = 273.16\,\frac{x}{x_{pt}}}$$



temperature empiriche

$\Rightarrow T_{min} \equiv \varnothing \Rightarrow$ temperatura assoluta T

unità di misura è il Kelvin (K)

$T_g = 273.15\ K$

$T_{pt} = 273.16\ K$ $\qquad$ $\Delta T\,(K) = \Delta t\,(^\circ C)$

$T_v = 373.15\ K$