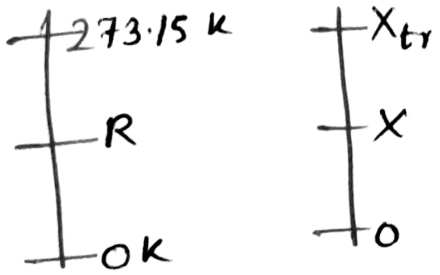
Thermometry

$$\frac{X - L.F.P}{U.F.P - L.F.P} = \frac{C}{100} = \frac{K - 273.15}{100} = \frac{F - 32}{180} = \frac{R}{80} = \text{constant}$$

New thermometer

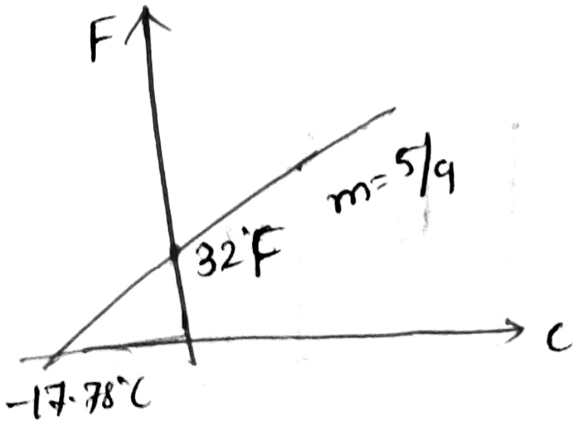


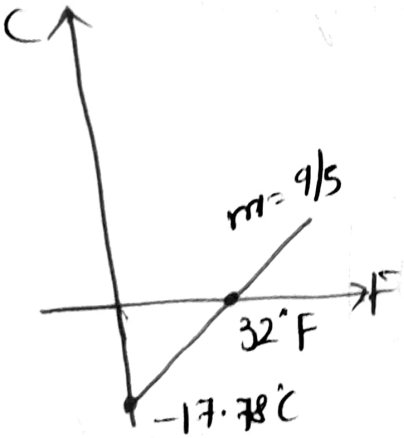
X_{tr} = triple point of water

$$\frac{R}{} = \left(\frac{X}{X_{tr}}\right) 273.15$$

$$t = \left(\frac{X_t - X_0}{X_{100} - X_0}\right) \times 100$$

where X can be V, C, P, R





at -40°C reading on °C & °F are equal.

triple point of H_2O — 273.16K at 6.11×10^{-3} Pa