

Abelardo Palácios Ribeiro  
Física 3 - T.I 4º Semestre  
Atividade A2 - Temperatura

04/03

Atividade Física A2  
Escala termodinâmica

1)

$$a) \frac{15}{5} = \frac{T_F - 32}{9}$$

$$27 = T_F - 32$$

$$32 + 27 = T_F$$

$$59 = T_F$$

$$c) \frac{T_C - 71 - 32}{5} = \frac{9}{9}$$

$$9T_C = -180$$

$$T_C = \frac{-180}{9}$$

$$T_C = -20$$

$$b) \frac{T_C}{5} = \frac{5 - 32}{9}$$

$$90 = -27 \cdot 5$$

$$C = \frac{-135}{9}$$

$$C = -15$$

$$d) \frac{-15}{5} = \frac{T_F - 32}{9}$$

$$-27 = T_F - 32$$

$$-27 + 32 = T_F$$

$$T_F = 5$$

2)  $T_x$  representa cerca de 80% do total de  $T_c$ .

$$3) \frac{80}{x} = \frac{100}{28}$$

$$160 = 10x$$

$$x = 16$$

$$8) F \rightarrow \frac{15}{9} = \frac{T_F - 32}{9} \quad K \rightarrow 15 = T_K - 273$$

$$27 = T_F - 32$$

$$273 + 15 = T_K$$

$$27 + 32 = T_F$$

$$288 = T_K$$

$$T_F = 59$$

4)

$$a) 127 = K - 273$$

$$c) C = 400 - 273$$

$$127 + 273 = K$$

$$C = 127$$

$$K = 400$$

$$d) -10 = K - 273$$

$$b) C = 200 - 273$$

$$-10 + 273 = K$$

$$C = -73$$

$$K = 263$$

$$5) \frac{T_c}{9} = \frac{72 - 32}{9}$$

$$9T_c = 200$$

$$T_c = 22,2$$

$$C = 22,2$$

$$6) Na \ C^\circ = -273,15^\circ$$

$$Na \ F^\circ = -459,67^\circ$$

7)

$$1^\circ \rightarrow \frac{T_c - 68 - 32}{9}$$

$$2^\circ \rightarrow \frac{T_c - 86 - 32}{9}$$

$$9T_c = 3605$$

$$9T_c = 2770$$

$$T_c = 780/9$$

$$T_c = 270/9$$

$$T_c = 20$$

$$T_c = 30$$

$$C_{min} = 20^\circ$$

$$C_{max} = 30^\circ$$