

TAREA FÍSICA

ENERGÍA E $[kg \frac{m^2}{s^2}]$

DENSIDAD ρ $[kg / m^3]$

TIEMPO t $[s]$

RADIO R $[m]$

10

$$E = E(\rho, t, R) \rightarrow E \propto \rho^a t^b R^c$$

ENERGÍA E $[kg \frac{m^2}{s^2}]$ $E = [m \frac{L^2}{T^2}]$

DENSIDAD ρ $[kg / m^3]$ $\rho = [m / L^3]$

TIEMPO T $[s]$ $T = [T]$

RADIO R $[m]$ $R = [L]$

$$E \propto \rho^a T^b R^c$$

$$m \frac{L^2}{T^2} = [m / L^3]^a \cdot [T]^b \cdot [L]^c$$

$$E \propto (\rho^a, T^b, R^c)$$

$$m \frac{L^2}{T^2} = [m \cdot L^{-3}]^a \cdot [T]^b \cdot [L]^c$$

$$m \frac{L^2}{T^2} = m^a \cdot L^{-3a} \cdot T^b \cdot L^c$$

$$E(\rho^1, T^{-2}, R^5)$$

$$m \frac{L^2}{T^2} = m^a \cdot L^{-3a+c} \cdot T^b$$

$$m^1 = m^a$$

$$L^2 = L^{-3a+c}$$

$$T^{-2} = T^b$$

$$1 = a$$

$$c = 5$$

$$b = -2$$