

PREGUNTA Taylor

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ENERGIA E $\left[\text{kg} \cdot \frac{\text{m}^2}{\text{s}^2} \right]$

DENSIDAD ρ $\left[\text{kg}/\text{m}^3 \right]$

TIEMPO T $[s]$

RADIO R $[m]$

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

$$E = \left[m \cdot \frac{L^2}{T^2} \right]$$

$$\rho = \left[m/L^3 \right]$$

$$T = [T]$$

$$R = [L]$$

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

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

$$m \cdot \frac{L^2}{T^2} = M^0 \cdot L^{-3 \cdot a} \cdot T^b \cdot L^c$$

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

$$M^1 = M^a$$

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

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

$$E \propto \rho^1 T^{-2} R^5$$

$$L = 5$$

$$b = -2$$

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