

time in [0008] [Math.5] , which was attained from the formula, (velocity of the substance $\times 1/g$) \times (time the substance took to progress $\times 1/g$) \times mass=energy in [0006] [Math.1] , there's no element of gradual diminution integrated. Therefore, the formula is to be calculated by substituting the relational expression in [0010] [Math.7] and [Math.8] .

[Math.13]

$$\begin{aligned}
 E &= m \times c \times T \\
 &= \sum_{K=1}^T m_K c_K \quad (1 \leq K \leq T) \\
 &= \sum_{X=1}^T m_1 (1 - T_x/T) \times c_1 (1 - T_x/T) \quad (1 \leq X \leq T) \\
 &= \sum_{X=1}^T m_1 c_1 (1 - T_x/T)^2 \\
 &= \sum_{K=1}^T m_1 c_1 (1 - T_K/T)^2
 \end{aligned}$$

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[0015]

Now, at this point, the significance of the formulae attained in [0013] [Math.12] and in [0014] [Math.13] are to be confirmed. The two formulae attained are both the total sum of a product, which is energy=mass (at its initial value) \times velocity of light (at its initial value) \times (1-x ; time the substance has passed under no gravity/time the substance passes under no gravity) ² , and they coincide with each other. It could be said that these formulae express the amount of energy corresponding to the time left behind to the substance, namely, the energy the substance retains at the point of time x, or potential energy. Also, from these formulae, it could be found that a substance gradually loses its potential energy within the passage of time.

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