

20/01/21

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Dimensions:-

~~Dimensional~~ Dimensional

* The dimensions of a physical quantity are the powers to which the fundamental units must be raised to obtain the unit of a given physical quantity.

(LMT)²

(Lent. Mas Time)

* Conversion followed while using SI Units
Rules for Writing (SI) Units

(i) Full name of ^Uunit always starts with small letter even named after a person

in → newton, ampere, coulomb

Not → Newton, Ampere, Coulomb

ii) symbol for ^Uunit named after a scientist should be in capital letter

in → N for newton, A for ampere

k for kelvin, c for coulomb

iii) symbols for all other units are written in small letter

iv) m for meter, kg for kilogram

s for second, cd for candela

(iv) One space is left between the last digit of numeral and the symbol of a unit

ie → 10 kg, 5 N, 15 m

Not 10kg, 5N, 15m

(v) The Units do not have plural forms
ie. 6 metre, 14 kg, 20 second, 18 kelvin
Not $\rightarrow$ 6 metres, 14 kgs, 20 seconds, 18 kelvins.

(vi) Full stop should not be used after the
units

(i.e) 7 metre, 12 N, 25 Kg
Not 7 metre., 12 N., 25 kg.

* Dimension and Dimensional Analysis

* Dimension

The dimensions of a physical quantity are the power to which the fundamental units must be raised in order to obtain the unit of a given Physical quantity.

* Dimensional formula

When any derived quantity is represented with appropriate power of symbols of the fundamental formula.

It is expressed by square bracket with no comma in between the symbols.