

UNITARY METHOD

Unitary Method is one in which the value of a unit quantity is first obtained to find the value of any given quantity.

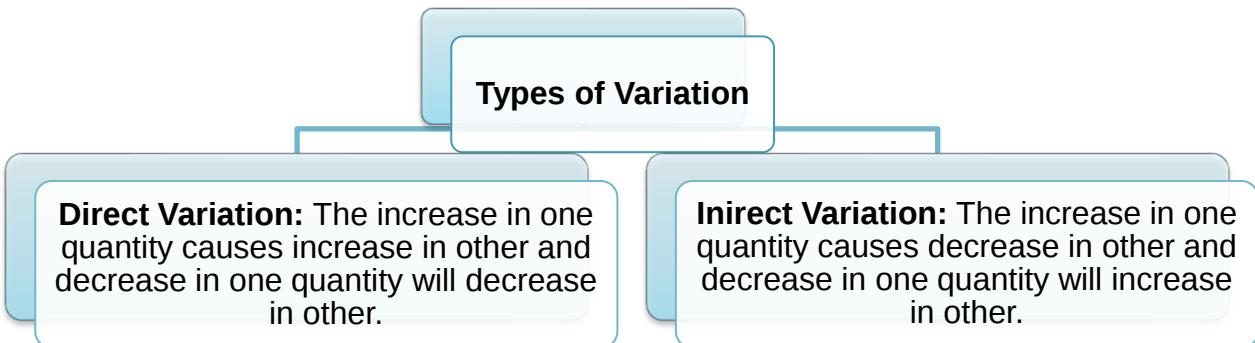
Variation means change

A quantity which takes different values is called a variable. Ex: x, y...

A quantity which does not change is called a constant. Ex: 2, $\frac{3}{4}$, π

DIRECT PROPORTION/DIRECT VARIATION: Let x and y be two variables such that ratio of y to x is a constant, y varies directly with x or y is directly proportional to x. This is represented as $y/x=k$: $y=kx$ where k = constant of proportionality .**Symbol used is " α ".**

INVERSE PROPORTION/IN DIRECT VARIATION: Let x and y be two variables such that product of two variables is a constant. i.e. $xy=k$: $x=k/y$ where k = constant of proportionality .**Symbol used is " $1/\alpha$ ".**



While applying unitary method, arrange statement in such a way that, whatever is asked to find in the question is written at the end of the statement.

TIME AND WORK:

- One day's work = $\frac{1}{\text{No of days required to complete the work}}$
- No. of days required to do certain work = $\frac{1}{\text{One day's work}}$
- No. of days required to complete certain work = $\frac{\text{Work to be completed}}{\text{One day's work}}$
- A completes work in x days and B in y days, then One day's work = $\frac{1}{x} + \frac{1}{y}$