Direct and Inverse Proportion

S.no	Term	Description
1	Direct Proportion	Two quantities x and y are said to be in **direct proportion** if they increase (decrease) together in such a manner that the ratio of their corresponding values remains constant.
		That is if $x/y=k$= [k is a positive number] = Constant Then x and y are said to vary directly. In such a case if $y1$, $y2$ are the values of y corresponding to the values $x1$, $x2$ of x respectively then $$\frac{x_1}{y_1} = \frac{x_2}{y_2}$$
2	Inverse proportion	Two quantities x and y are said to be in **inverse proportion** if an increase in x causes a proportional decrease in y (and vice-versa) in such a manner that the product of their corresponding values remains constant. That is, if $xy = k$= Constant Then x and y are said to vary inversely. In this case if y_1, y_2 are the values of y corresponding to the values x_1, x_2 of x respectively then $x_1 y_1 = x_2 y_2$