

Variation

how variables are related to one another.

Direct Variation

if x and y are **directly proportional**
then,

$$y = k \cdot x$$

Inverse Variation

if x and y are **inversely proportional**
then,

$$y = \frac{k}{x}$$

k is called the **constant of variation**

The variables x and y are *directly proportional* with one another.
if $y = 24$ when $x = 6$, find y when $x = 4$ and when $x = 12$.

The variables x and y are *inversely proportional* with one another.
if $y = 4$ when $x = 6$, find y when $x = 2$ and when $x = 24$.