

Notes for Notebook - Rate of Change (SLOPE)

A rate of change is a rate that describes how one quantity changes in relation to another quantity.

"delta" means change

Δ dependent

 Δ independent

Δ y

 Δ x

Rise
 $r = \frac{\text{Rise}}{\text{Run}}$
Run

Rate of Change

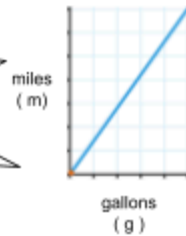
or
SLOPE (m)

Linear Equation
 $y = mx + b$

m = slope or rate

b = y intercept or starting value where, $x = 0$

Example



$Y = mx + b$
 $Y = mx + 0$
 $Y = mx$
 $m = y/x$

Formula
Rate = $\frac{\text{miles}}{\text{gallon}}$
 $r = \frac{m}{g}$

Units
miles / gallon
miles per gallon
miles in 1 gallon
miles in each gallon