

Average Speed Formula (s)

The average speed is the average of speed of a moving body for the overall distance that it has covered.

$$s = \frac{d}{t}$$

Where,

s = Average speed

d = Total distance travelled

t = Total time taken to cover the distance

Acceleration Formula (a)

Acceleration is defined as the rate of change in velocity to the change in time. It is denoted by symbol a.

$$a = \frac{v - u}{t}$$

Where,

a = Acceleration

u = Initial Velocity

v = Final Velocity

t = Time taken

Density Formula (ρ)

The density of material shows the denseness of it in a specific given area.

$$\rho = \frac{m}{V}$$

Where,

ρ = Density

m = Mass of the body

V = Total time taken to cover the distance

Newton's Second Law

According to Newton's second law of motion, the force can be expressed by the product of mass and acceleration of the body.

$$F = m \times a$$

Where,

F = Density

m = Mass of the body

a = Acceleration

Power Formula (P)

The capacity to do some work is termed as Energy. The Energy spent to do work in a unit amount of time is termed as Power.

$$P = \frac{W}{t}$$

Where,

P = Power

W = Work done

t = Time taken

Weight Formula

Weight is the force which an object experience due to gravity.

$$W = m \times g$$

Where,

W = Weight

m = Mass of the body

g = Acceleration due to gravity

Pressure Formula (P)

The pressure is defined as the amount of force applied per unit area of the object.

$$P = \frac{F}{A}$$

Where,

P = Pressure

F = Force applied

A = Total area of the object

Kinetic Energy Formula (K. E.)

Kinetic energy is the energy that is possessed by a body due to its state of motion.

$$KE = \frac{1}{2} \times m \times v^2$$

Where,

KE = Kinetic Energy

m = Mass of the body

v = Velocity of the body

Ohm's law Formula (P)

Current flowing through a conductor is directly proportional to the potential difference between two endpoints of the conductor.

$$V = I \times R$$

Where,

V = Voltage measured in Volts

I = Current flowing through the conductor in Amperes

R = Resistance of the conductor in Ohm.

Frequency Formula (f)

The pressure is defined as the amount of force applied per unit area of the object.

$$f = \frac{V}{\lambda}$$

Where,

f = Frequency of the wave

V = Velocity or wave speed

λ = Wavelength of the wave