

Formulas of Gravitational Acceleration

$$vf = vi + gt$$

$$df = di + vit + 1/2 gt^2$$

$$vf^2 = vi^2 + 2g(df - di)$$

g is negative when an object is thrown up, and positive when it falls down

Formulas of Constant Acceleration

$$vf = vi + at$$

$$df = di + vit + 1/2 at^2$$

$$vf^2 = vi^2 + 2a(df - di)$$

Newton's Laws of Motion

First Law an object at rest stays at rest, and an object in motion stays in motion unless an unbalanced force is applied

Second Law $F = ma$

Law

Third Law The law of action and reaction

Law

Friction Force

normal force a contact force in which a surface vertically affects an object

friction force a force that prevents an object's motion

types of friction static and kinetic

formula of friction force (static) $f = \mu_s \times mg$

formula of friction force (kinetic) $f = \mu_k \times mg$

formula of Normal Force $F = mg$ (vertical) or the object's weight (horizontal)

$\mu_s > \mu_k$

friction depends on mass, not surface area

weight is measured in N, mass is measured in Kg



By TheGoldenClover

Not published yet.

Last updated 11th March, 2024.

Page 1 of 1.

Sponsored by **Readable.com**

Measure your website readability!

<https://readable.com>