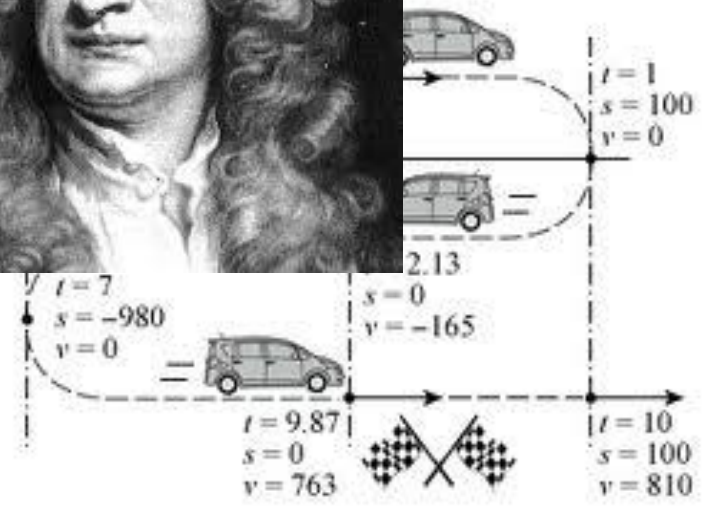
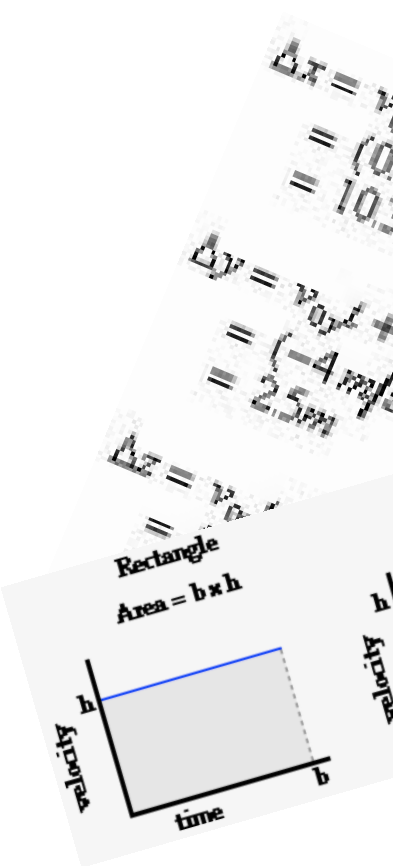
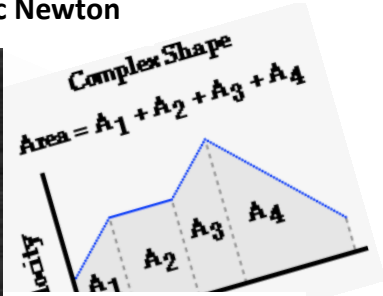


# Kinematics

[The Study of Motion]

Sir Isaac Newton



$$\Delta x = v_0 t + \frac{1}{2} a t^2$$

$$= (0.4 \text{ m/s}^2)(2.5\text{s}) + \frac{1}{2}(2.5\text{s})^2$$

$$= 10.375 \text{ m}$$

$$\Delta v = v_0 t + \frac{1}{2} a t^2$$

$$= (-4 \text{ m/s}^2)(2.5\text{s}) + \frac{1}{2}(2.5\text{s})^2$$

$$= 2.5 \text{ m/s}$$

$$\Delta z = v_0 t + \frac{1}{2} a t^2$$

$$= (-4 \text{ m/s}^2)(2.5\text{s}) + \frac{1}{2}(2.5\text{s})^2$$

$$= 2.5 \text{ m/s}$$

Vectors, scalars, measurement/conversions, position, distance, displacement, speed, velocity, motion-time graphs, uniform motion, uniform acceleration, kinematics equations