

**Kinematic Equations for Motion
with Constant Acceleration**

$$v = v_o + at$$

$$x = \frac{1}{2}(v_o + v)t$$

$$v^2 = v_o^2 + 2ax$$

$$x = v_o t + \frac{1}{2}at^2$$

x Displacement (km, m)	a acceleration (m/s ²)	t time (s, h)	Vo =Vi initial velocity (m/s, km/h)	V = Vf Final velocity (m/s , km/h)

We need to know at least 3 values.