

5 kinematic equations.

$$\Delta \vec{d} = \frac{\vec{v}_1 + \vec{v}_2}{2} t$$

$$\vec{v}_2 = \vec{v}_1 + \vec{a}t$$

$$\Delta \vec{d} = \vec{v}_1 t + \frac{1}{2} \vec{a} t^2$$

$$\Delta \vec{d} = \vec{v}_2 t - \frac{1}{2} \vec{a} t^2$$

$$\vec{v}_2^2 = \vec{v}_1^2 + 2\vec{a}\Delta \vec{d}$$