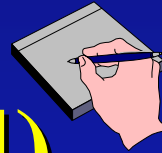


Equations for Constant Acceleration

(text, page 113-114)



- ⌈ $x = x_0 + v_0 t + \frac{1}{2} a t^2$
- ⌈ $\Delta x = v_0 t + \frac{1}{2} a t^2$
- ⌈ $v = v_0 + a t$
- ⌈ $\Delta v = a t$
- ⌈ $v^2 = v_0^2 + 2a(x - x_0)$
- ⌈ $v^2 = v_0^2 + 2a \Delta x$

$$x = x_0 + \bar{v} t$$

$$x = x_0 + v_0 t + \frac{1}{2} a t^2$$

$$\begin{aligned} \bar{v} &= \frac{v_0 + v_f}{2} = \frac{v_0 + (v_0 + \Delta v)}{2} \\ &= \frac{2v_0 + a t}{2} = v_0 + \frac{1}{2} a t \end{aligned}$$

