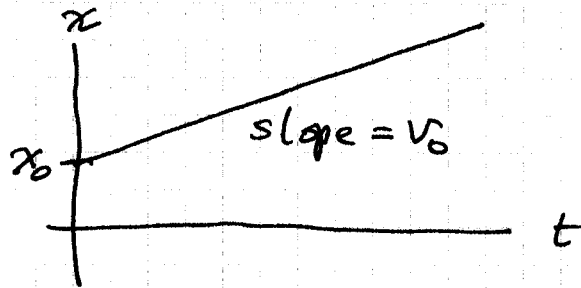
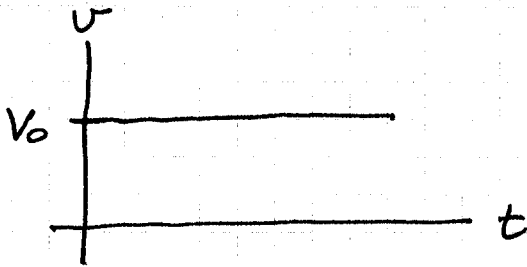


Constant Velocity

$$v = v_0 \quad (\text{constant})$$

$$D = v_0 t \quad (\text{distance} = \text{velocity} \times \text{time})$$

$$x = x_0 + v_0 t \quad (\text{coordinate position})$$

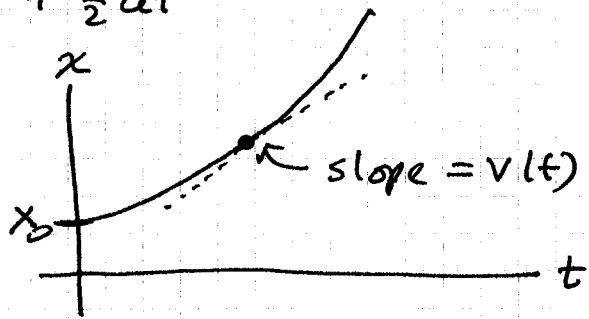
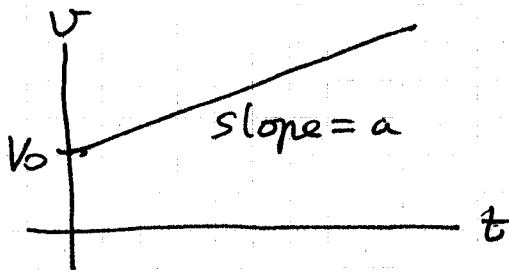


Constant Acceleration

$$v = v_0 + at$$

$$D = v_0 t + \frac{1}{2} at^2$$

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



Mathematica Commands

- To define a function f of u

$$f[u_] := u^2 + 3u + 5$$

(or whatever)

- To plot a function $f(u)$

$$\text{Plot}[f[u], \{u, u_1, u_2\},$$

Plot Range $\rightarrow \{\{a, b\}, \{c, d\}\}$]

$\{a, b\}$ = u range on the graph

$\{c, d\}$ = f range on the graph

- To solve an equation, numerically,

$$\text{Find Root}[eq, \{s, s_0\}]$$

eq is the equation

s is the variable to be solved for

s_0 is an initial guess for the solution