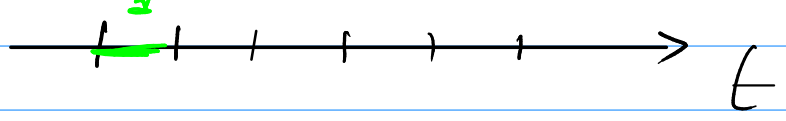
$y = f(x) \xrightarrow{\text{derivata}} f'(x)$

$\xleftarrow{\text{antiderivata}}$

$$\int_{x_1}^{x_2} f(x)\,dx$$

$s(t) \xrightarrow[\text{derivata}]{} v(t) = \frac{ds}{dt}$

$\cdot \Delta t_i$ $\quad v_i$ (medie)



$s : \frac{1}{2}\text{temp}\ v_1 \ ; \ \frac{1}{2}\text{temp}\ v_2$

$$\cdot \Delta s_i = v_i \Delta t_i$$

$$\Delta s = \sum_{i=1}^{n} \Delta s_i$$

$$= \sum_{i=1}^{n} v_i \, \Delta t_i$$

$\Delta t \to 0$ $\qquad$ $\Delta t \to dt$

$\to$ $n \to \infty$!!

$$\sum_{i=1}^{n} \longrightarrow \int_{t_1}^{t_2} dx$$

$\Rightarrow$ $dx = v(t)\,dt$ $\Leftarrow$ $v(t) = \frac{dx}{dt}$

$$\Delta s\Big|_{t_1}^{t_2} = \int_{t_1}^{t_2} v(t)\,dt$$

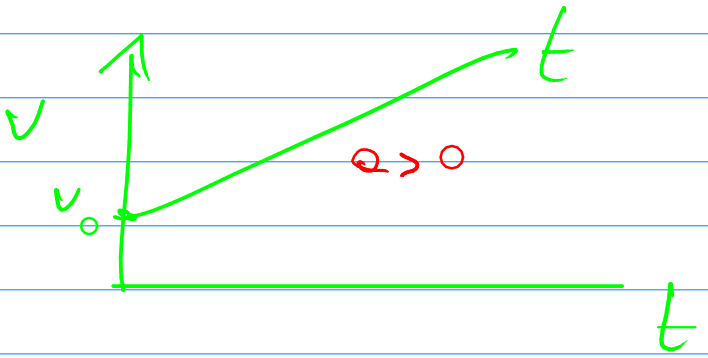
$$s(t_2) - s(t_1) = \int_{t_1}^{t_2} v(t)\,dt$$

$$s(t_2) = s(t_1) + \Delta s\Big|_{t_1}^{t_2}$$

$$s(t_2) = s(t_1) + \int_{t_1}^{t_2} v(t)\,dt$$

1) • $v(t) = v_0$

2) • $v(t) = v_0 + a \cdot t$



"accel." $= \frac{dv}{dt} = a$

3) • $v(t) = v_0 + a(t) \cdot t$

1.4 kW/m