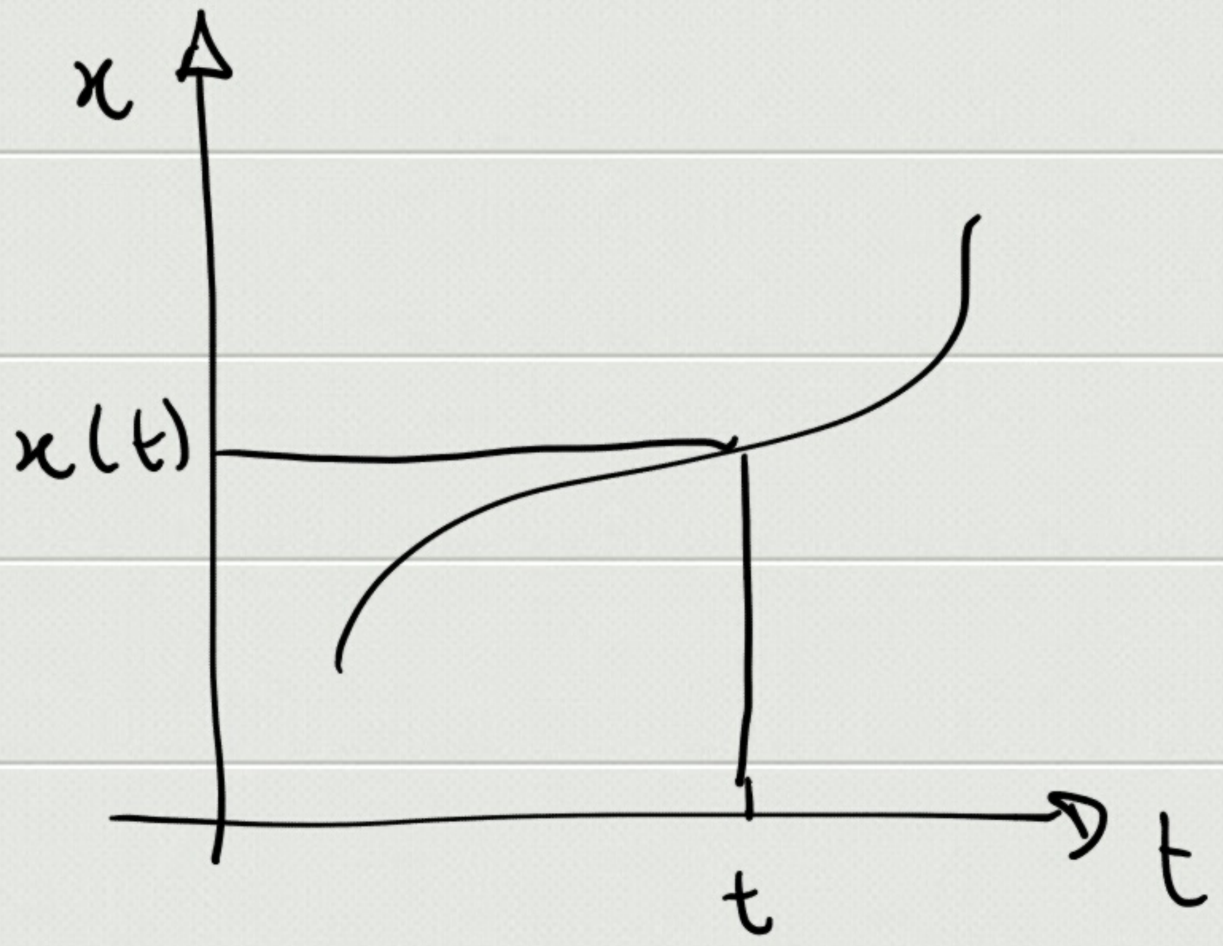
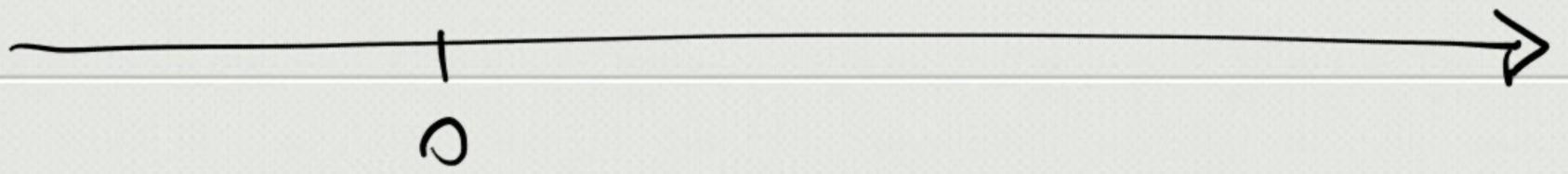
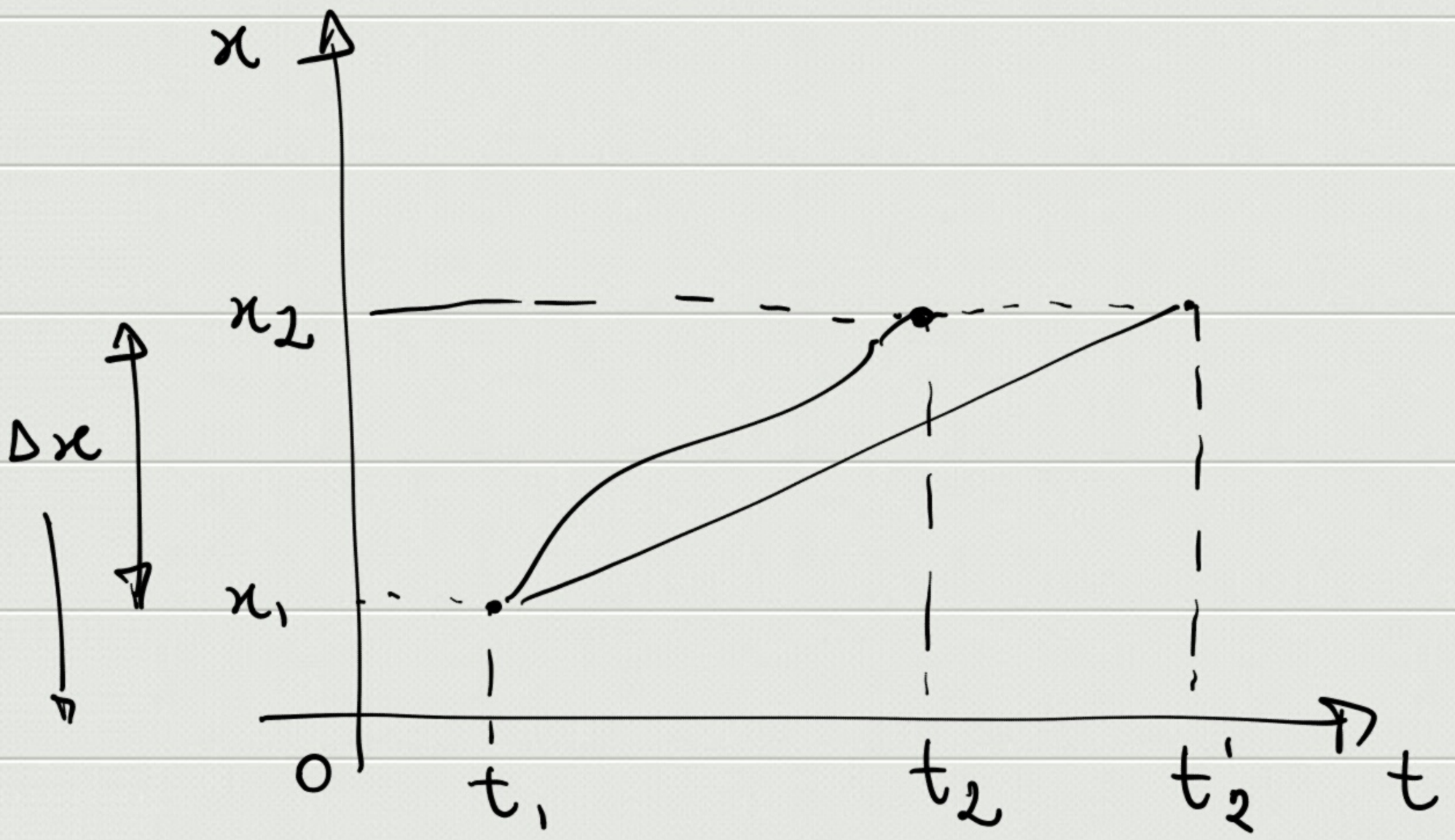




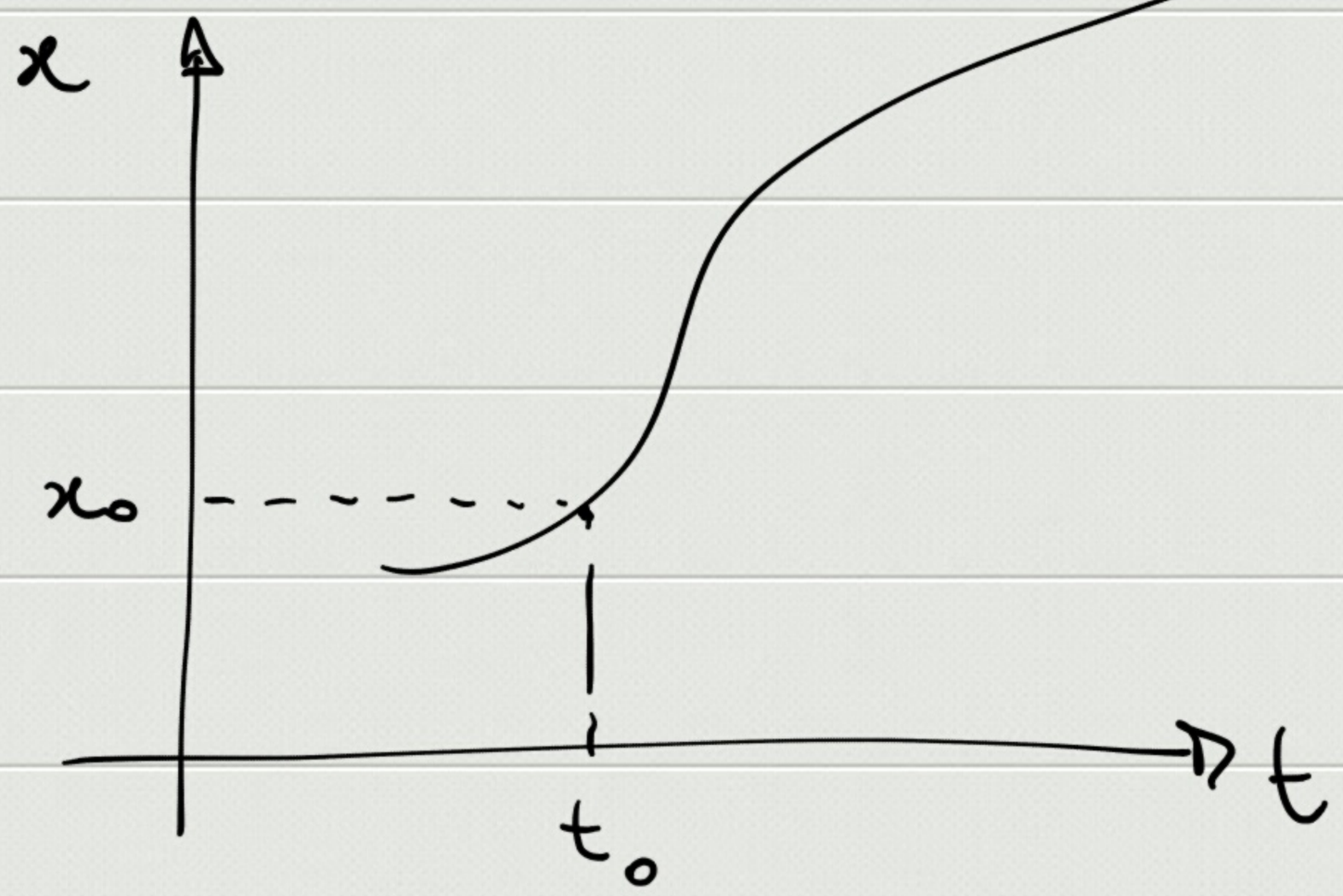


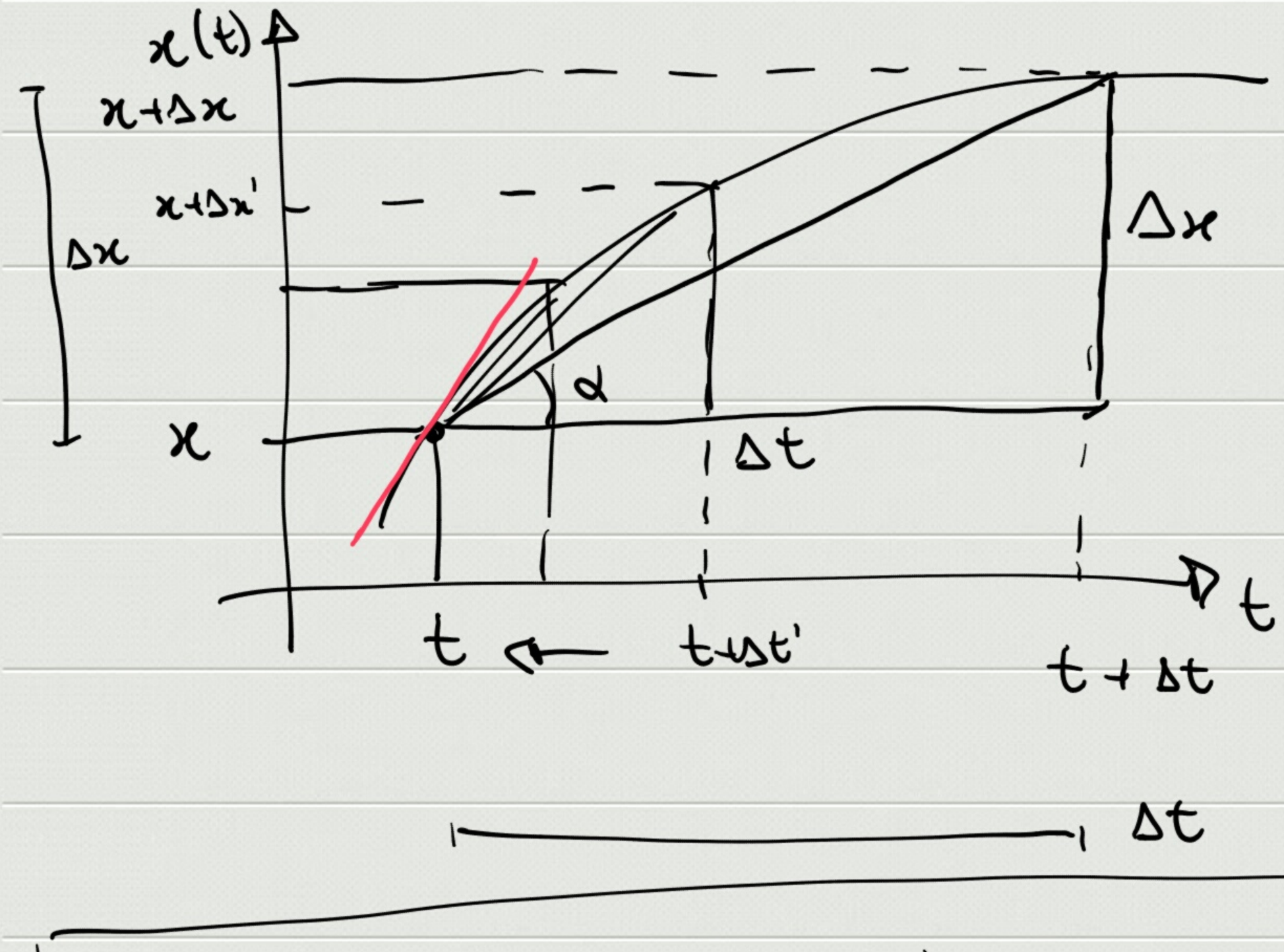
$= x_2 - x_1$

$\Delta t = t_2 - t_1$

$$v_m = \frac{x_2 - x_1}{t_2 - t_1} = \frac{\Delta x}{\Delta t}$$

velocitat media

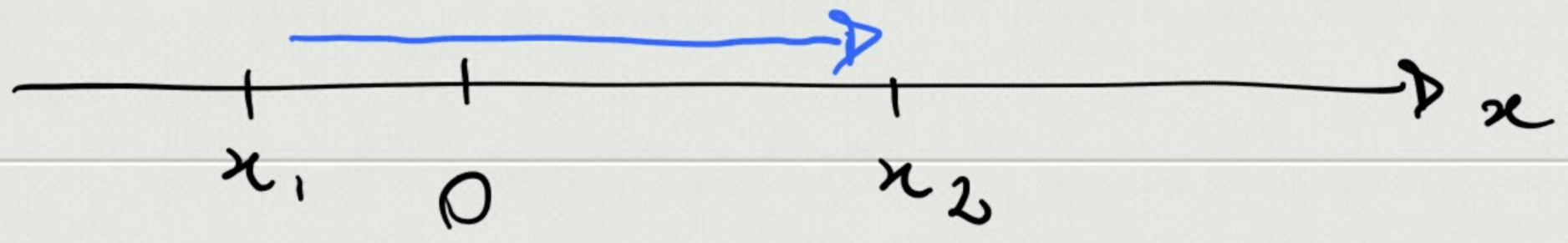




$$v_m = \frac{\Delta x}{\Delta t} = \operatorname{tg}\alpha$$

$$v(t) = \lim_{\Delta t \to 0} \frac{x(t+\Delta t) - x(t)}{\Delta t} = x'(t)$$

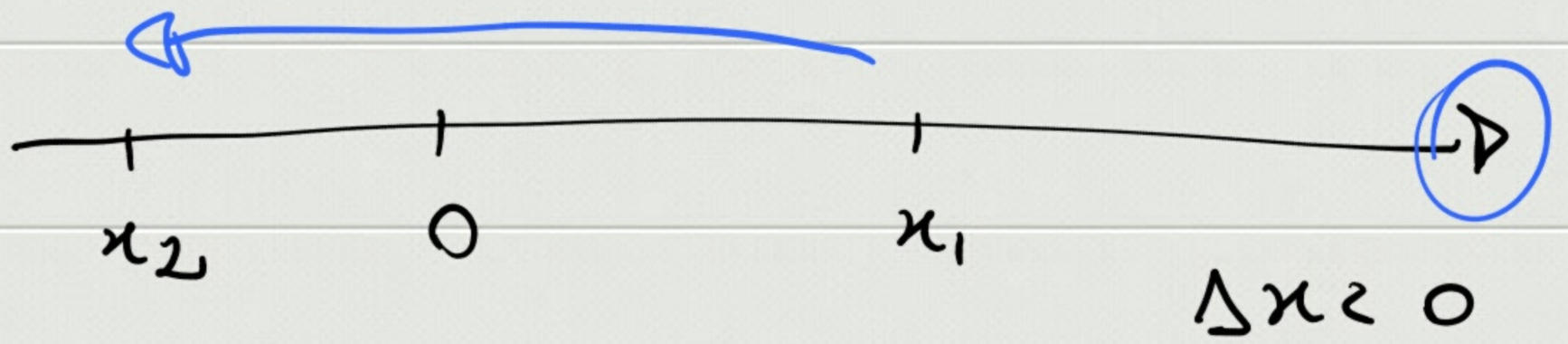
Velocità istantanea



$\Delta x > 0$

$\Delta t > 0$

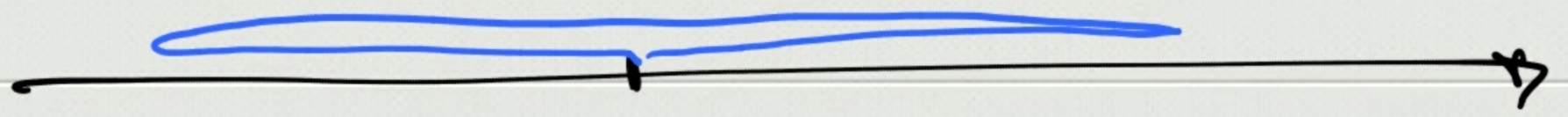
$v_m = \frac{\Delta x}{\Delta t} > 0$



$\Delta x < 0$

$\Delta t > 0$

$v_m = \frac{\Delta x}{\Delta t} < 0$



$x_f = x_i$

$v_m = \frac{\Delta x}{\Delta t} = \frac{x_f - x_i}{t_f - t_i} = 0$