



y	x_{max}	x_{min}	Δx	\bar{x}	$\Delta x / x$	$L(y - 0)$	$ \bar{x} - L(y - 0) $
5	37.9	37.73	0.17	37.815	0.0045	—	—
4	38.25	38.04	<u>0.21</u>	38.145	<u>0.0055</u>	38.115	<u>0.03</u>
3	38.51	38.33	0.18	38.420	0.0047	38.415	0.005
2	38.79	38.62	0.17	38.705	0.0044	38.71	0.005
1	39.12	38.91	<u>0.21</u>	39.015	0.0054	—	—

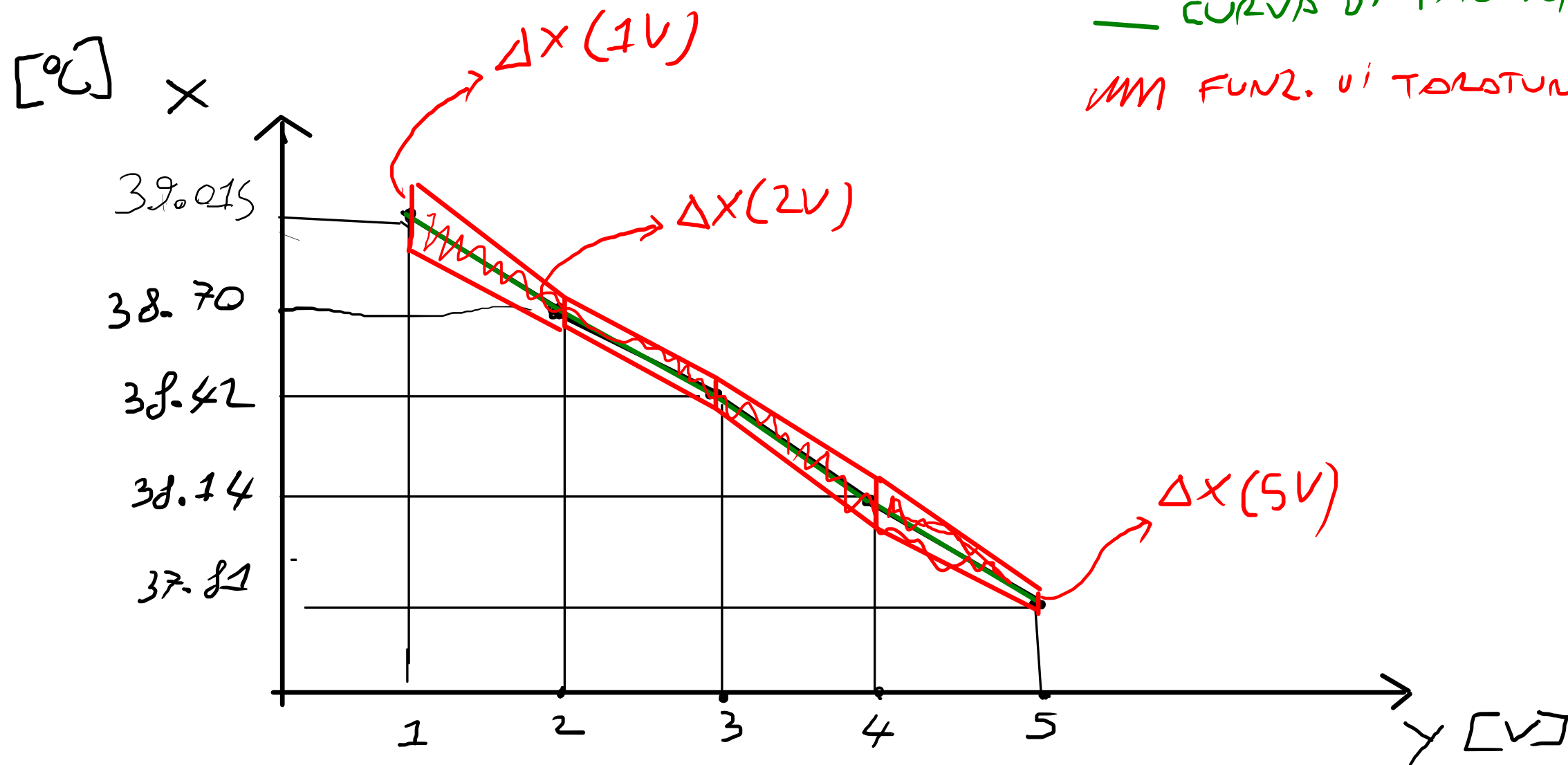
$$\varepsilon_A = 0.21^\circ\text{C}$$

$$\bar{x} = \frac{x_{max} + x_{min}}{2}$$

$$\varepsilon_R = 0.0055$$

$$\varepsilon_e = 0.03^\circ\text{C}$$

— CURVA di TARATURA
/// FUNZ. di TARATURA



$$(5V; 37.815^{\circ}C) \quad (1V; 39.015^{\circ}C)$$

$$X = C(Y - 0)$$

$$C = \frac{37.815 - 39.015}{5 - 1} \left[\frac{^{\circ}C}{V} \right] = -0.3 \left[\frac{^{\circ}C}{V} \right]$$

$$S = 1/C = -3.333 \text{ V}/^{\circ}C$$

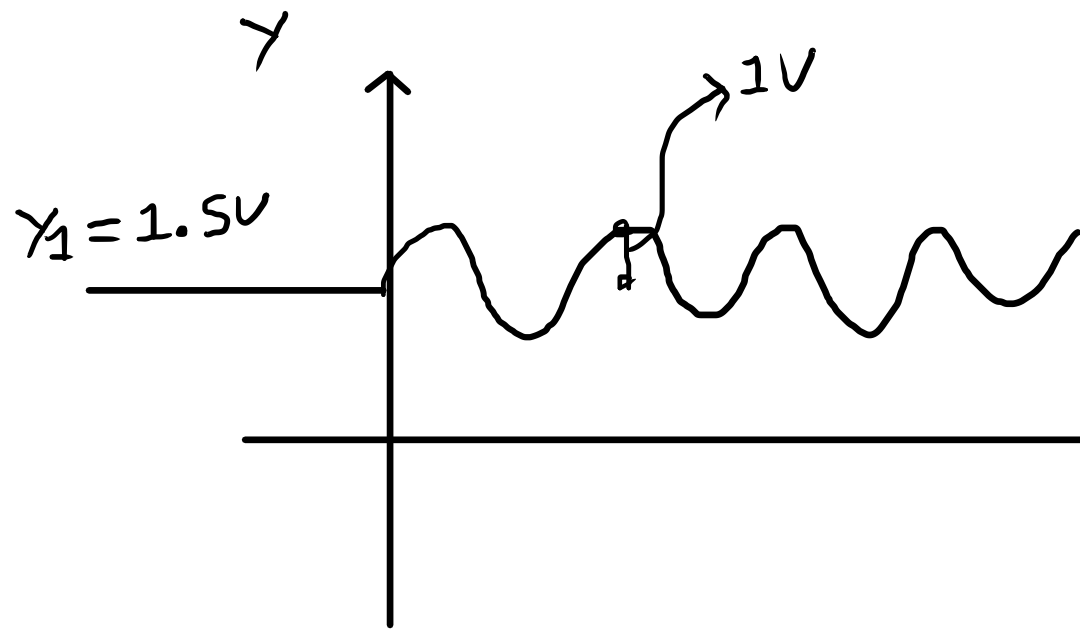
$$Q = Y - \frac{X}{C} = 131V$$

$$X = -0.3(Y - 131)$$

$$Y = 4.5V \rightarrow X = ?$$

$$X_n = -0.3(4.5 - 131) = 37.95^{\circ}C$$

$$X = X_n \pm (0.21/2 + 0.03) \left[^{\circ}C \right]$$



$$y = 1.5V + \sin(2\pi f t) \quad t > 0$$

$$x = ?$$

$$SE \quad P.P \rightarrow \omega_p$$

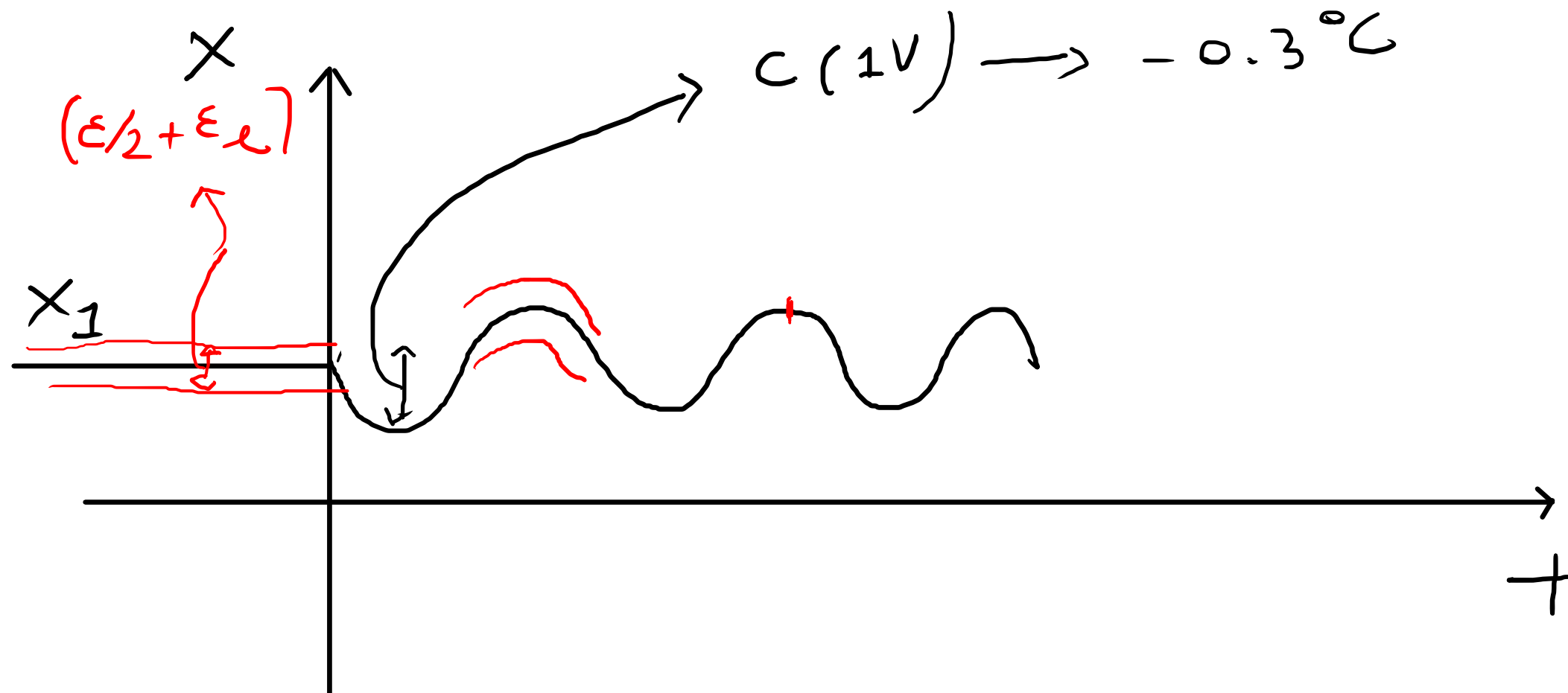
$$\omega_p \gg 2\pi f$$

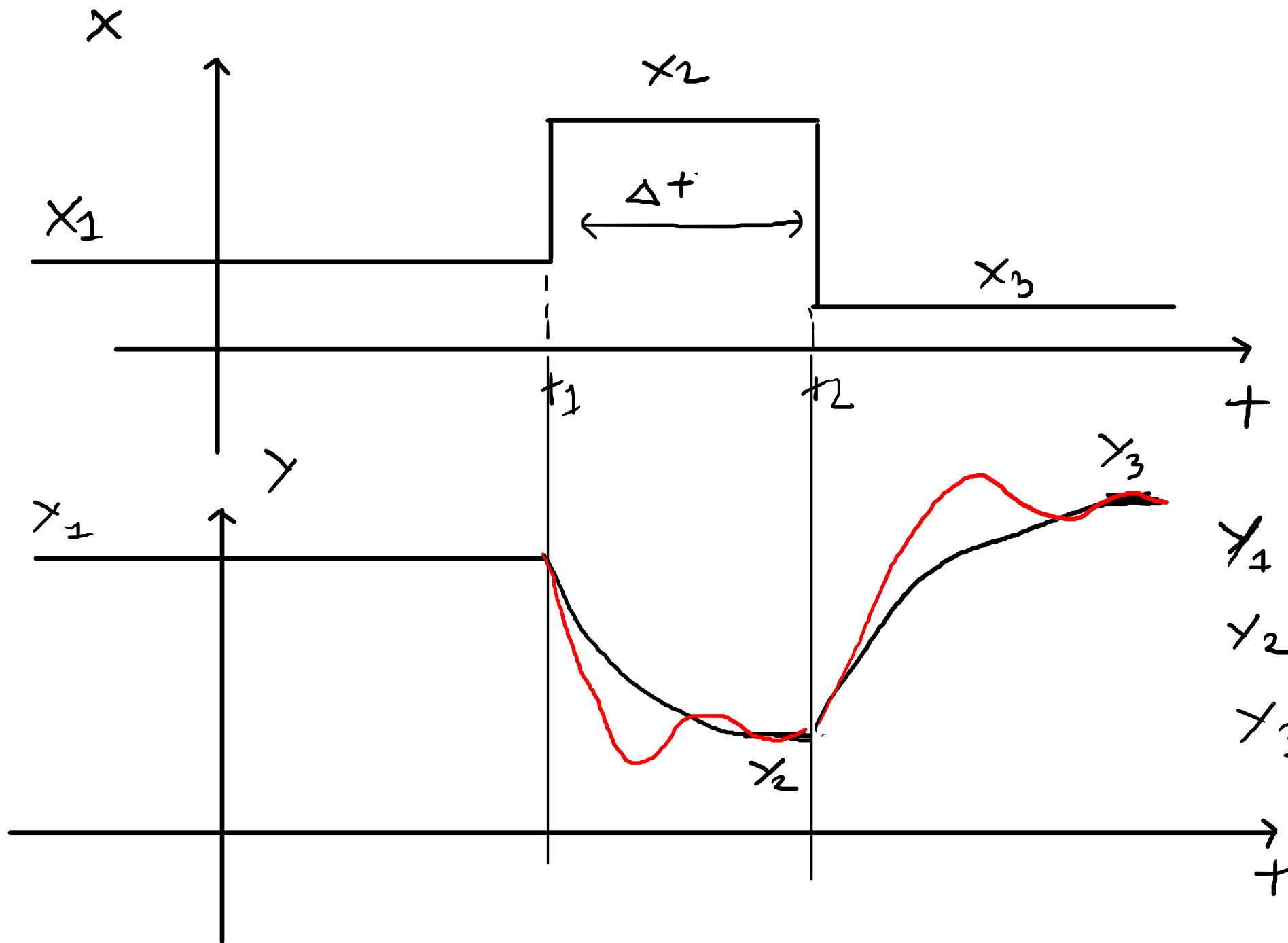
$$x_{\sim} = C(y(t) - 0)$$

$$x = x_{\sim} \pm (\epsilon_{1/2} + \epsilon_e)$$

$$x = C(y_1 - 0) \pm (\epsilon_{1/2} + \epsilon_e) \quad t < 0 \rightarrow x = x_1 = 38.85^\circ C$$

$$x = C(y_1 + \sin(2\pi f t) - 0) \pm (\epsilon_{1/2} + \epsilon_e) \quad t > 0$$





$$x_1 = 38.1^\circ\text{C}$$

$$x_2 = 39^\circ\text{C}$$

$$x_3 = 37.9^\circ\text{C}$$

possibile

+ andamento
di y ?

$$y_1 = 5x_1 + 0 = \frac{x_1}{c} + 0$$

$$y_2 = \frac{x_2}{c} + 0$$

$$y_3 = \frac{x_3}{c} + 0$$