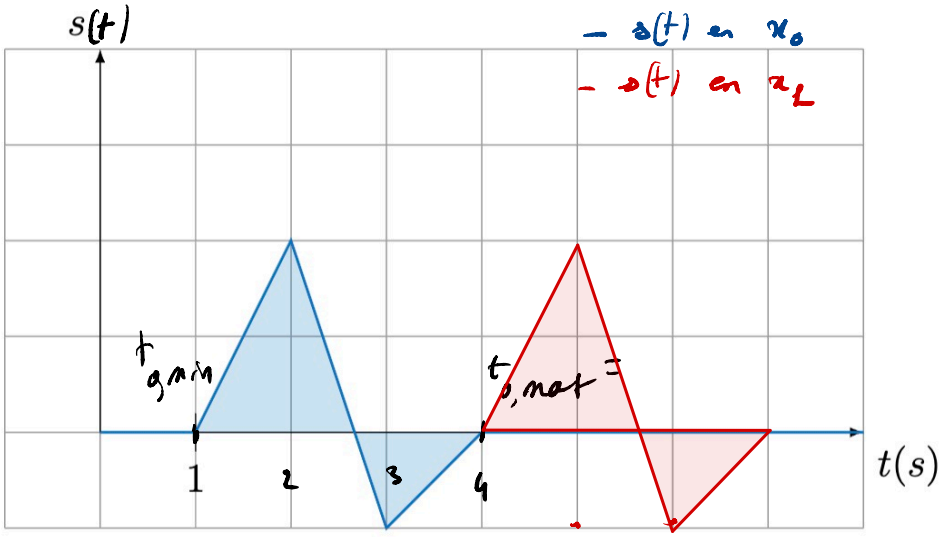
- Exercice 1 -

1



$x_1(t) = x_0(t) + c\,\Delta t$ avec $\Delta t = t_1 - t_0$

$$t_1 = \frac{x_1 - x_0}{c} + t_0$$

$$t_{1,max} = \frac{x_1 - x_0}{c} + t_{0,max} \rightarrow \text{A.N.} \quad t_{1,max} = \frac{3-0}{1} + 4 = 7$$

$$t_{1,min} = \frac{x_1 - x_0}{c} + t_{0,min} \rightarrow \text{A.N.} \quad t_{1,min} = \frac{3-0}{1} + 1 = 4$$

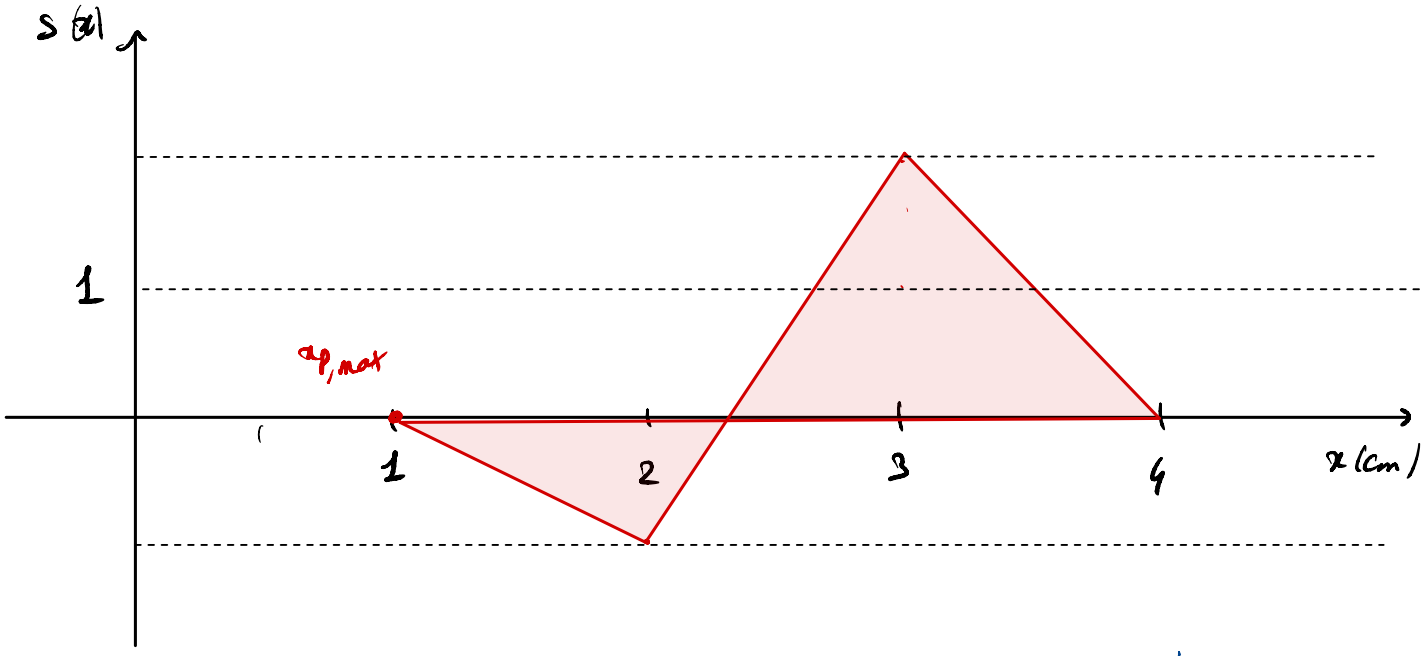
2

$$x_p - ct_p = x_0 - ct_0$$

pour $t_0 = t_{0,max}$ $\quad x_{p_{max}} = x_0 + c(t_p - t_{0,max})$ ($x_0 \rightarrow 0$)

$= 1\,(7-4) = 1$ cm

pour $t_0 = t_{0,min}$ $\quad x_{p_{min}} = 0 + 1\,(7-1) = 4$ cm



Rq Qd 1 seconde est parcourue, le signal parcourt 1 cm !