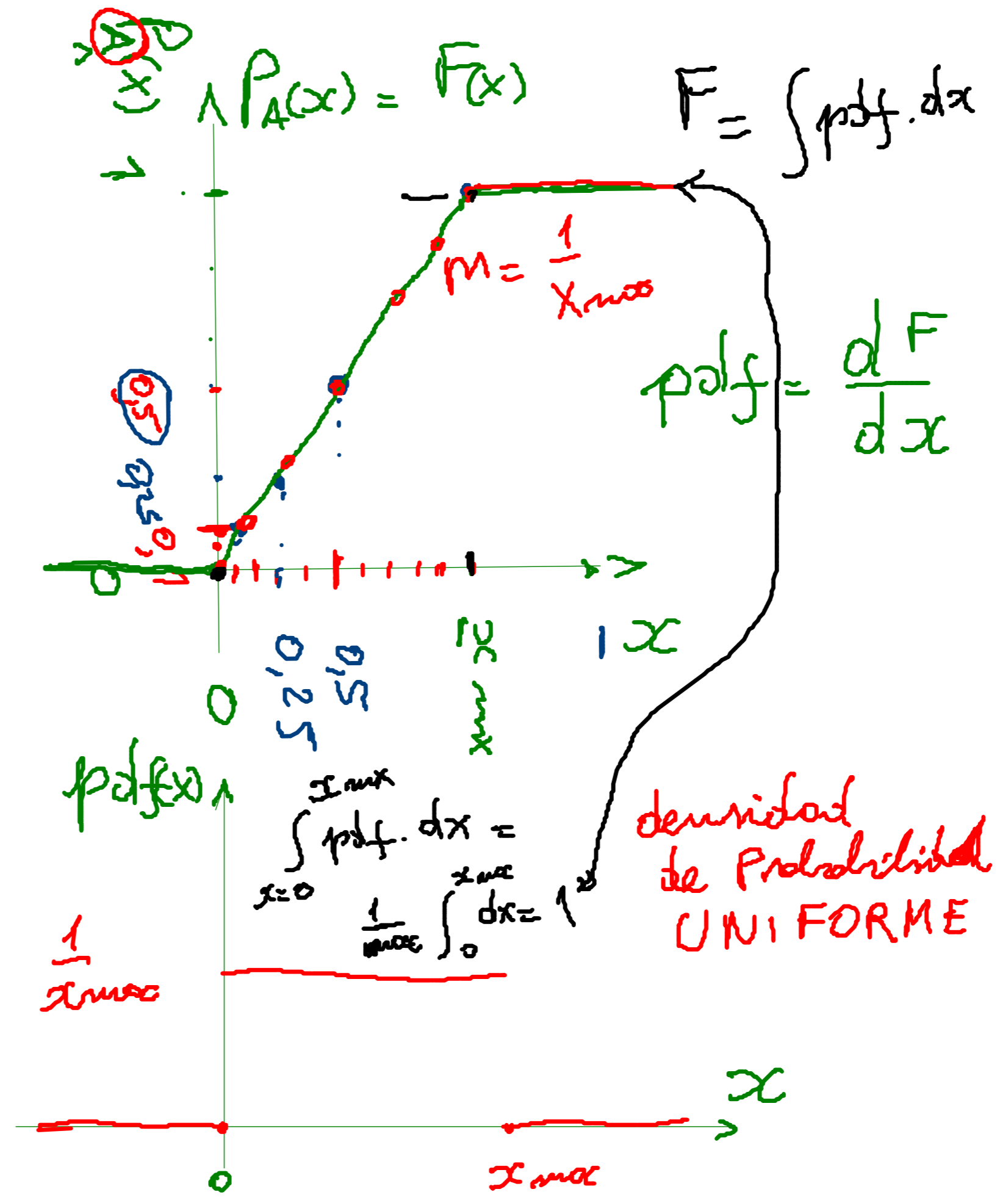


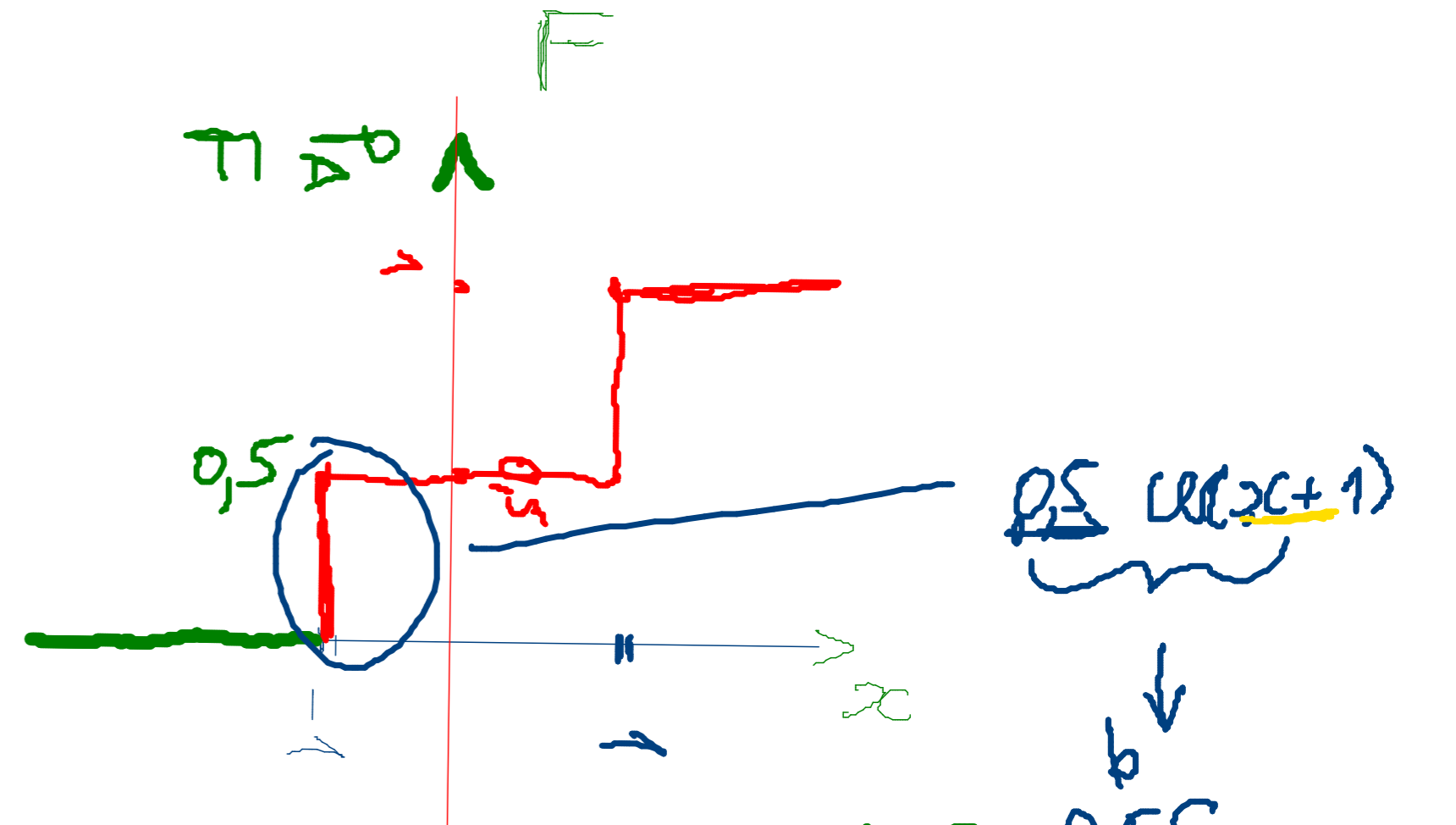
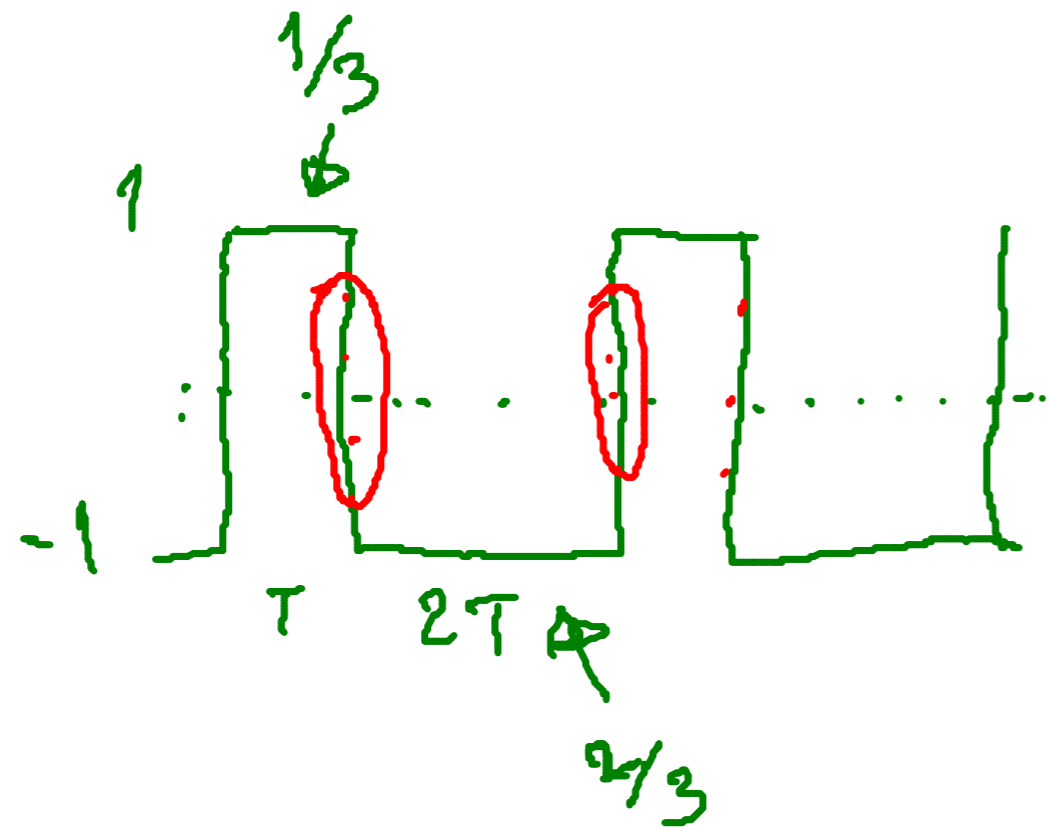
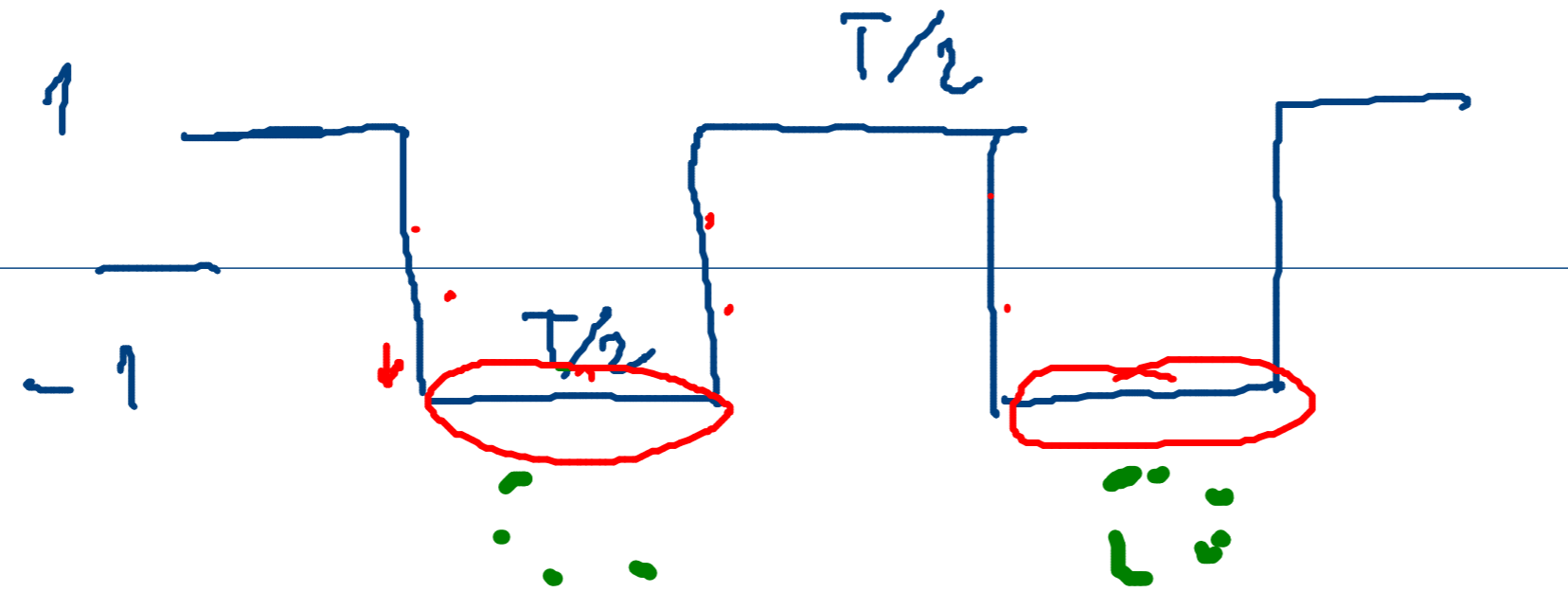
$P(x < x_i)$

F

P_A



$N = 100000$



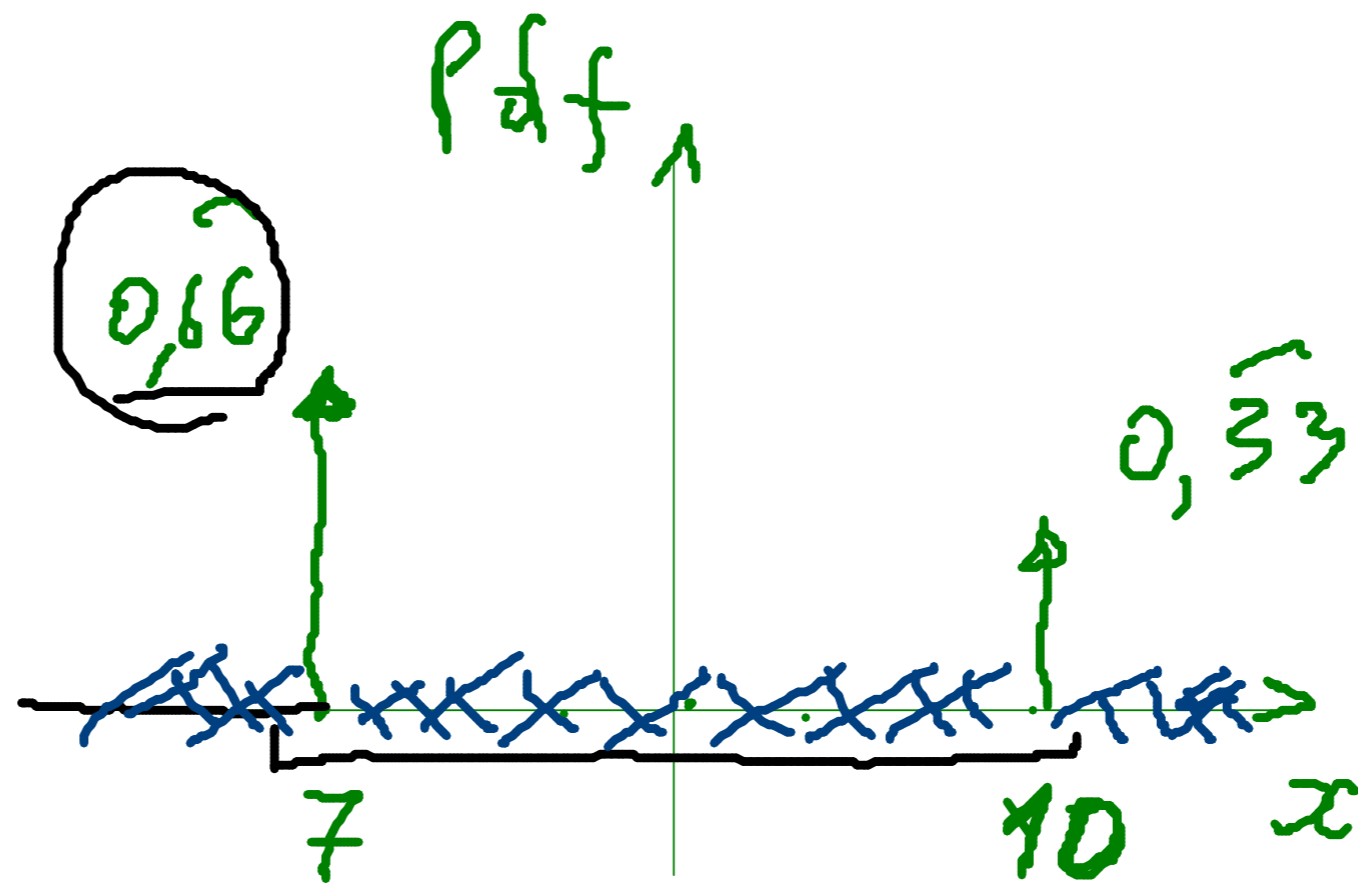
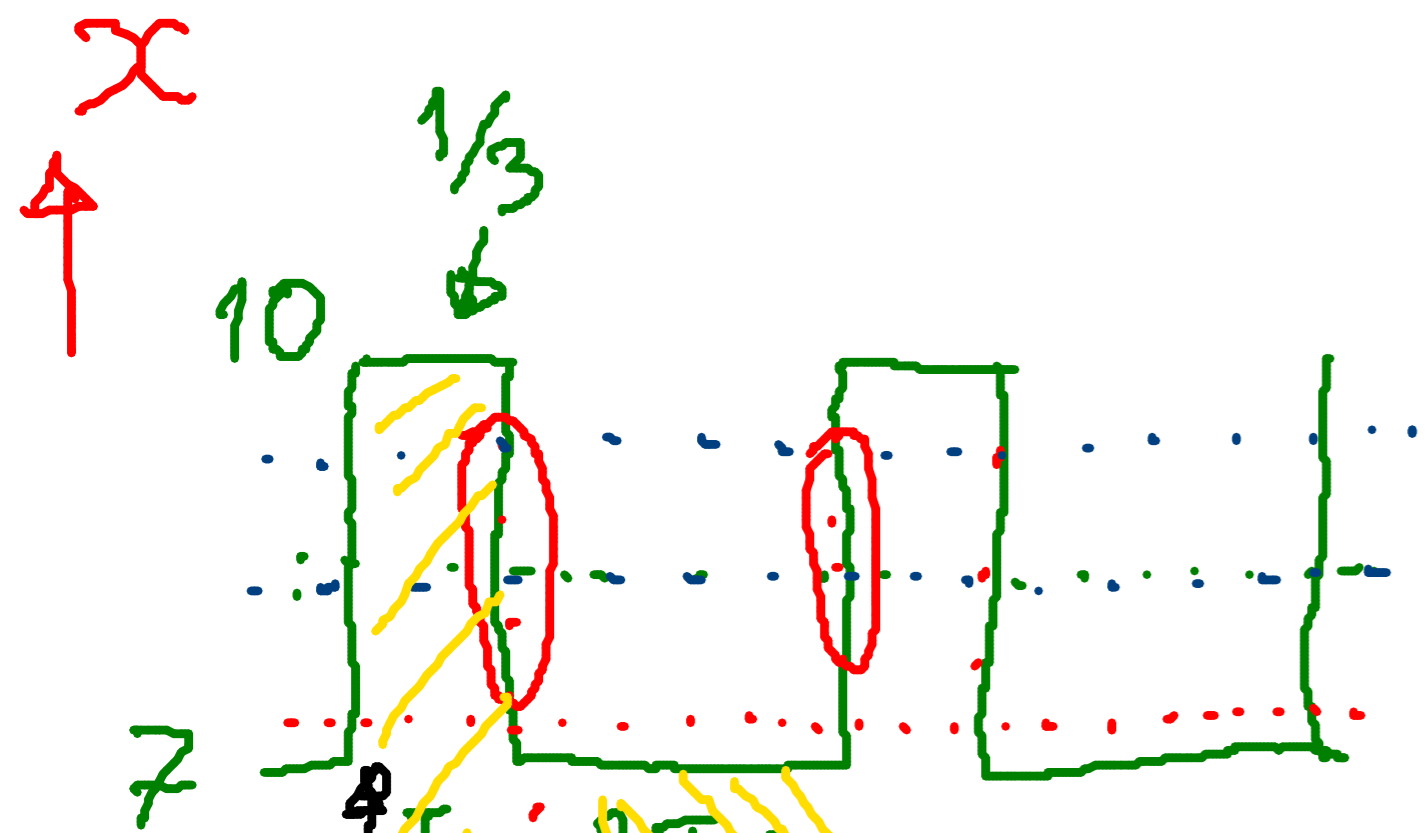
$pdf = \frac{dF}{dx}$

$0.5 \ll (x+1)$
 \downarrow
 0.55



$0.5 \cdot 1 = \int 0.5 \delta(x) \cdot dt$

$\int_{-\infty}^{+\infty} \delta(x) \cdot f(x) \cdot dx = 1 \cdot f(0)$



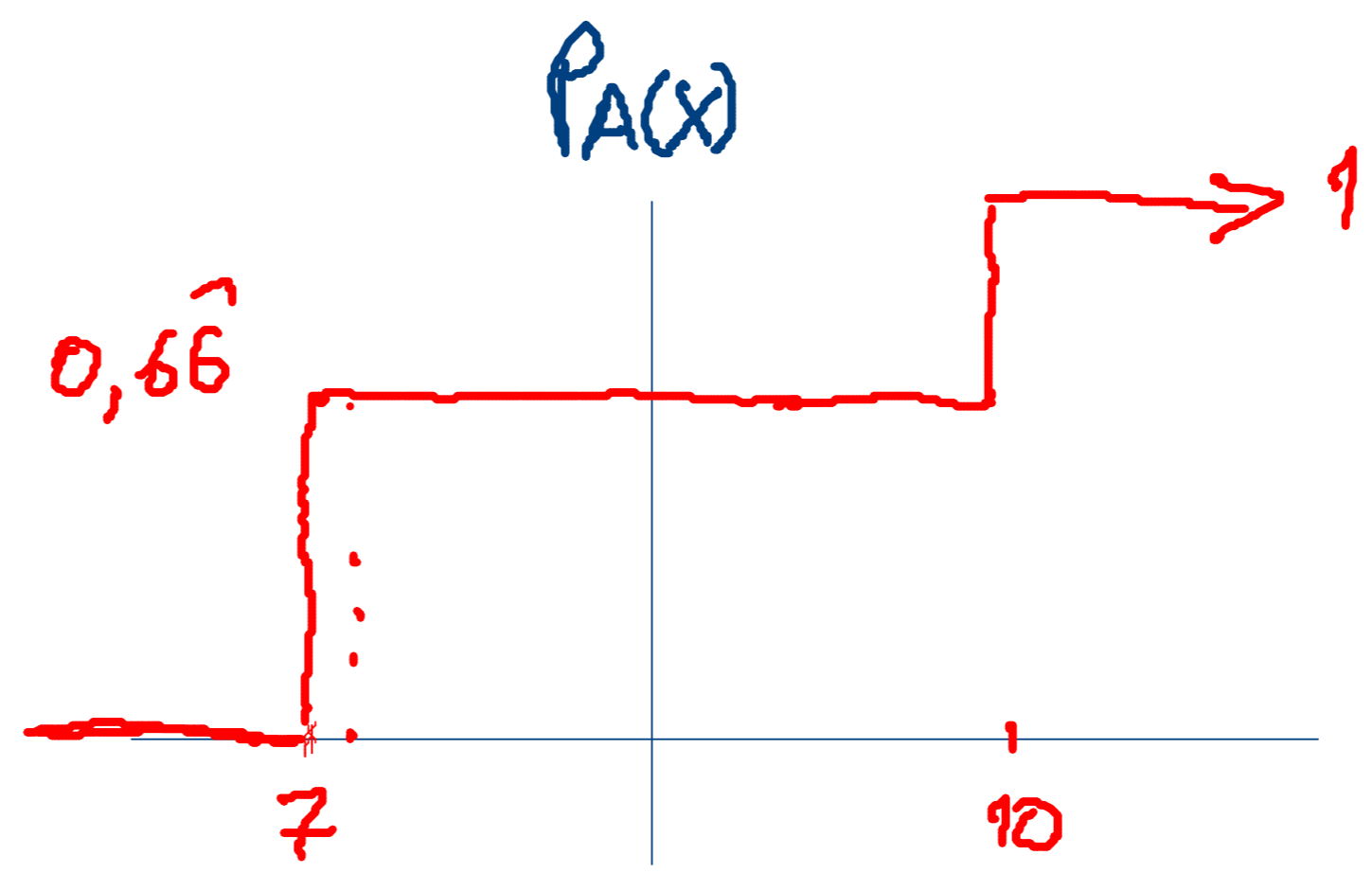
$$\bar{X} = \int_{7^-}^{10^+} p_{df} \cdot x \cdot dx$$

$$= 0,66 \int_{7^-}^{10^+} \delta(x-7) \cdot 7 \cdot dx + 0,33 \int_{10^-}^{10^+} \delta(x-10) \cdot 10 \cdot dx$$

$$= 0,66 \cdot 7 + 0,33 \cdot 10$$

$$= 4,67 + 3,33$$

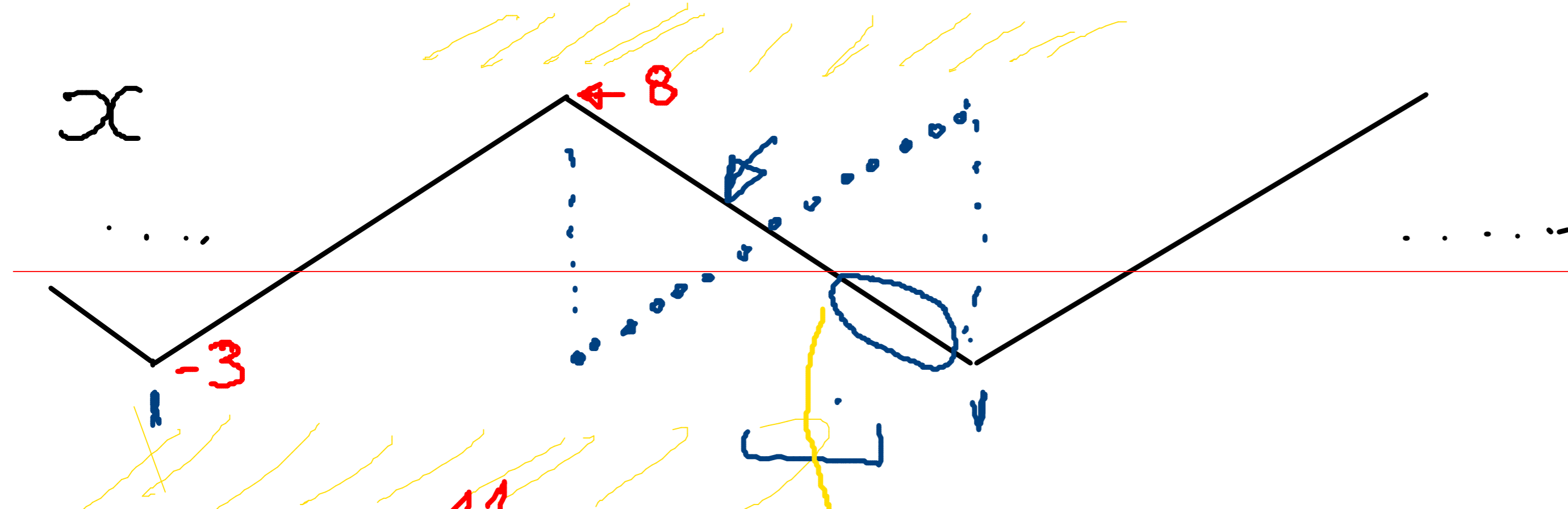
$$= 8$$



$$\langle x \rangle = \frac{1}{3T} \int_0^{3T} x \cdot dt$$

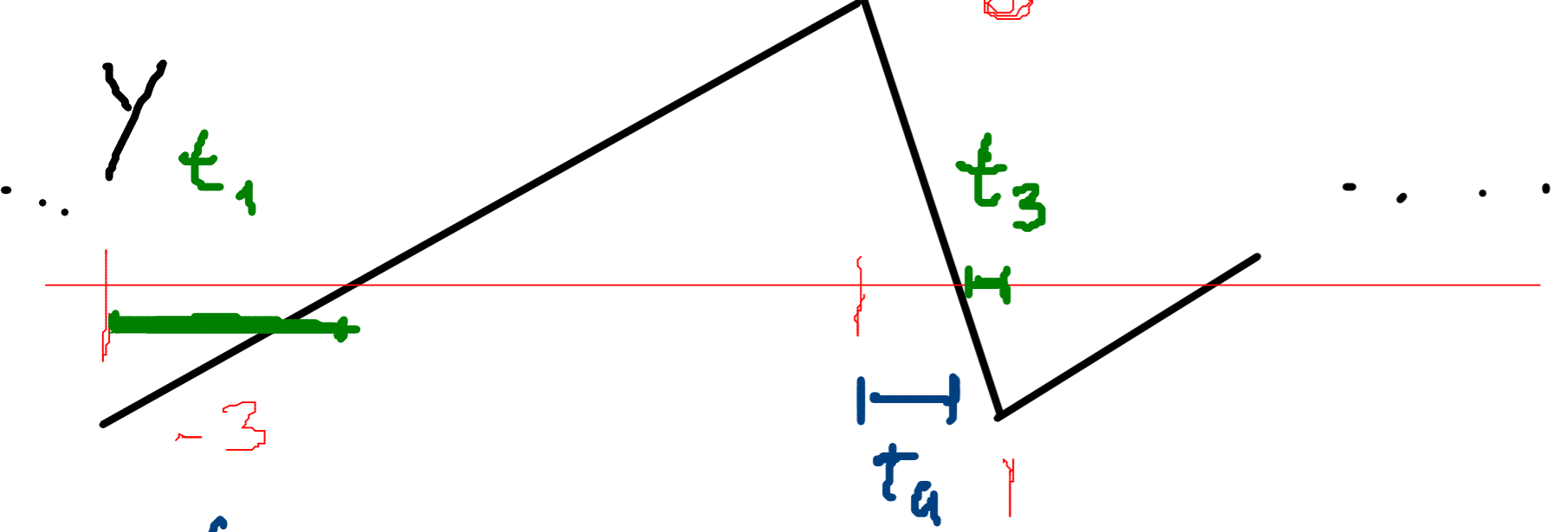
$$= \frac{1}{3T} \left[\int_0^T 10 \cdot dt + \int_T^{3T} 7 \cdot dt \right]$$

$$\langle x \rangle = \frac{1}{3T} [10 \cdot T + 7 \cdot 2 \cdot T] = \frac{24T}{3T} = 8$$



$$\mu = \frac{11}{1}$$

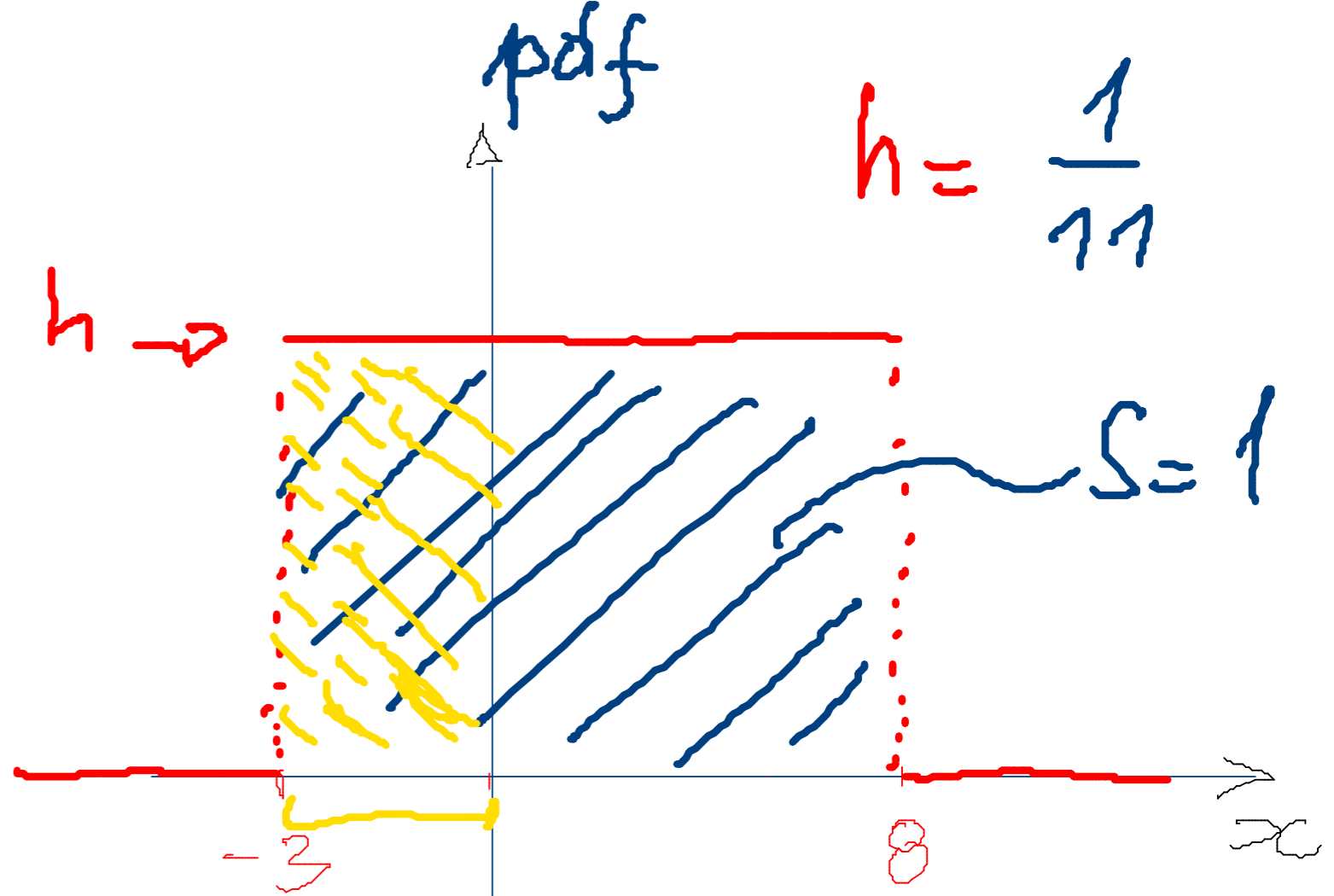
$$t_2$$



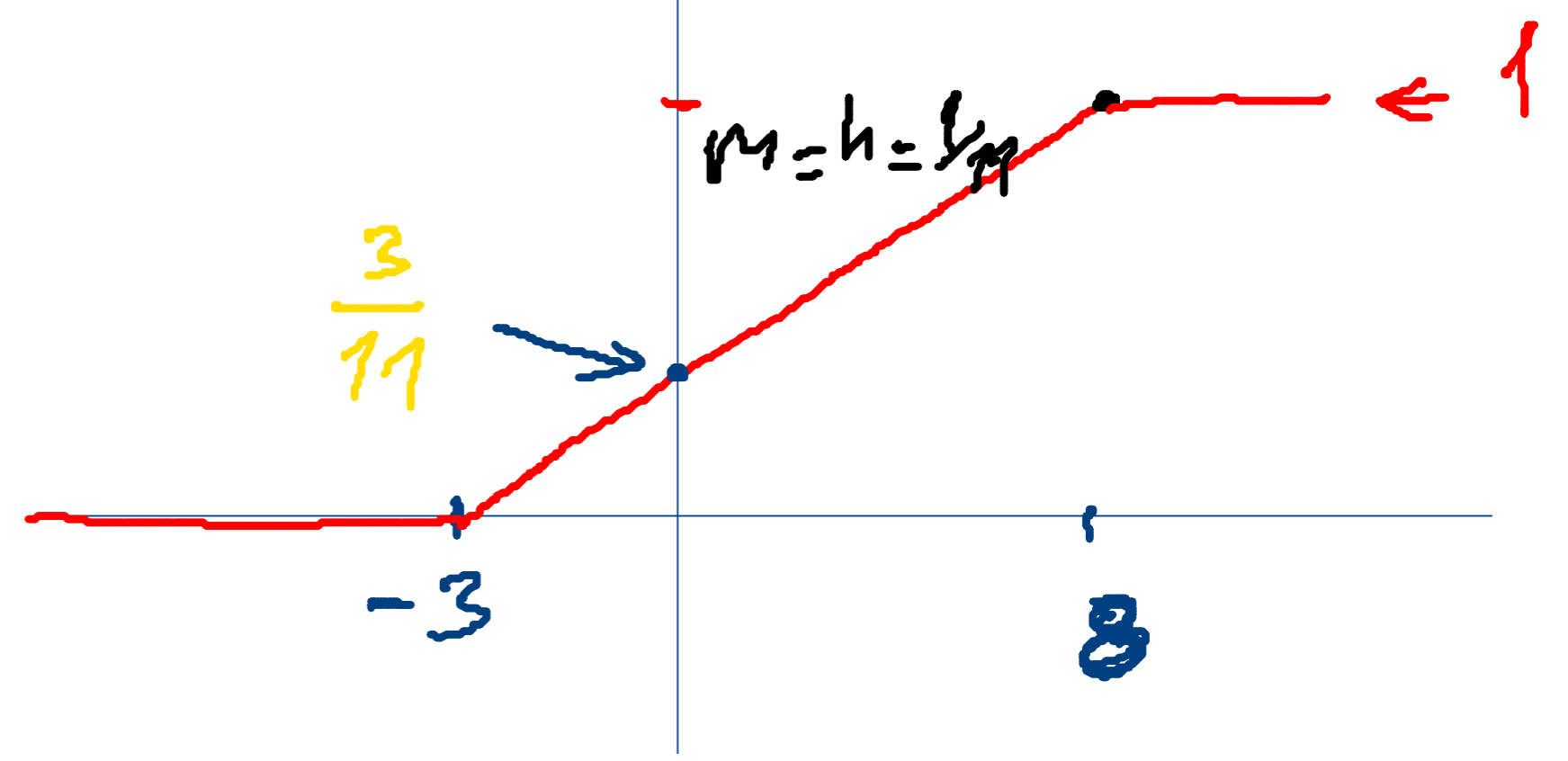
$$\frac{t_1}{t_1 + t_2}$$

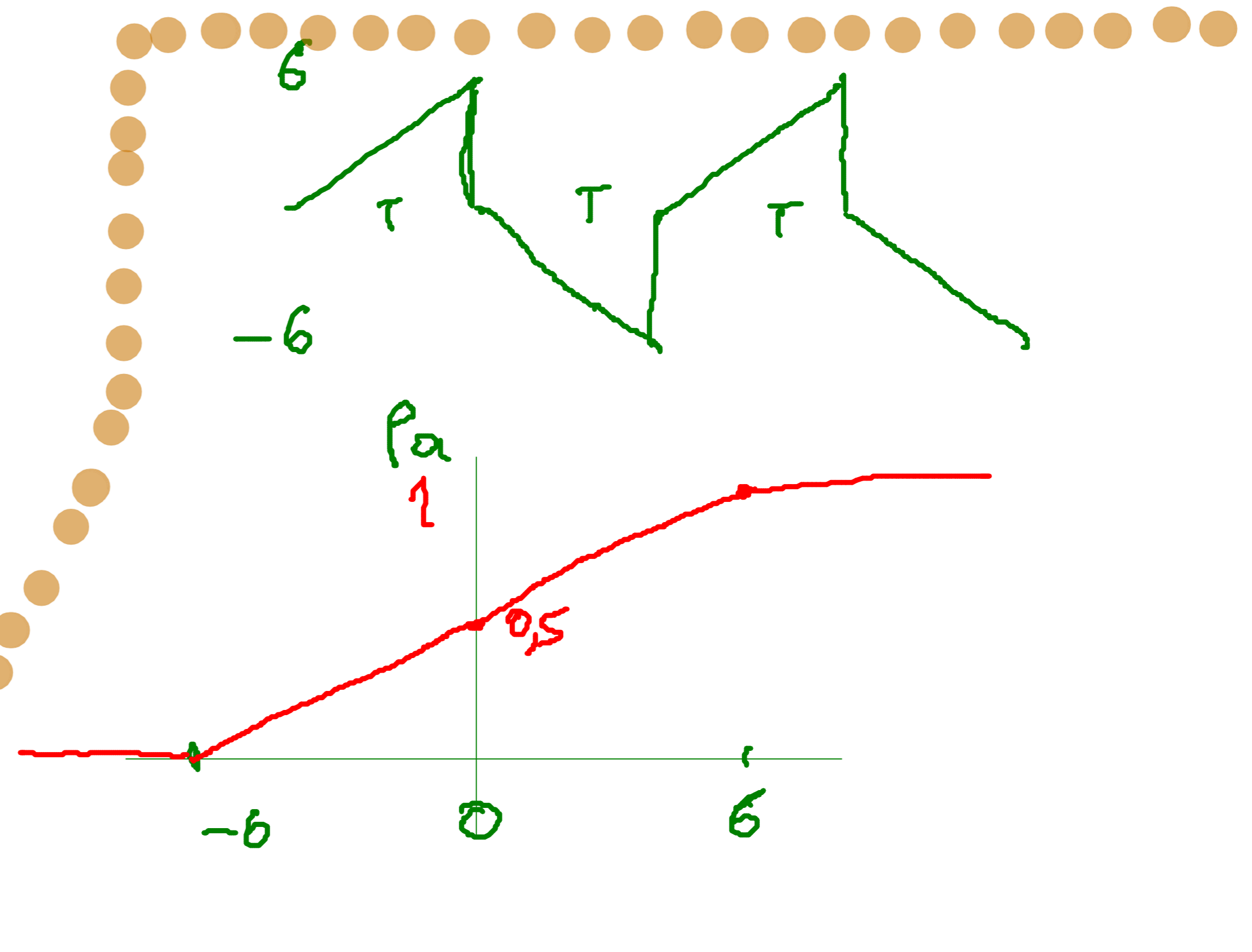
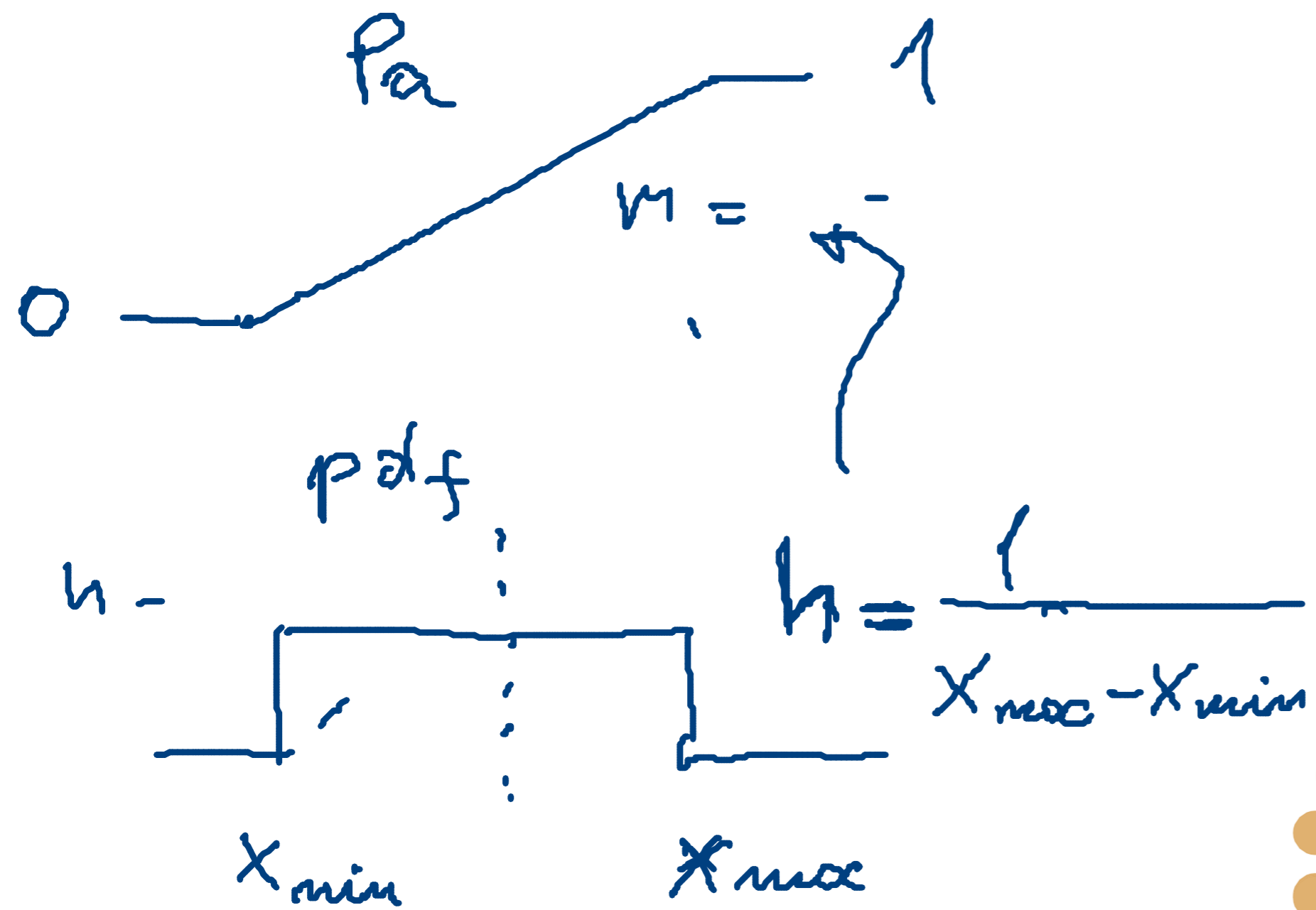
$$P(x < 0)$$

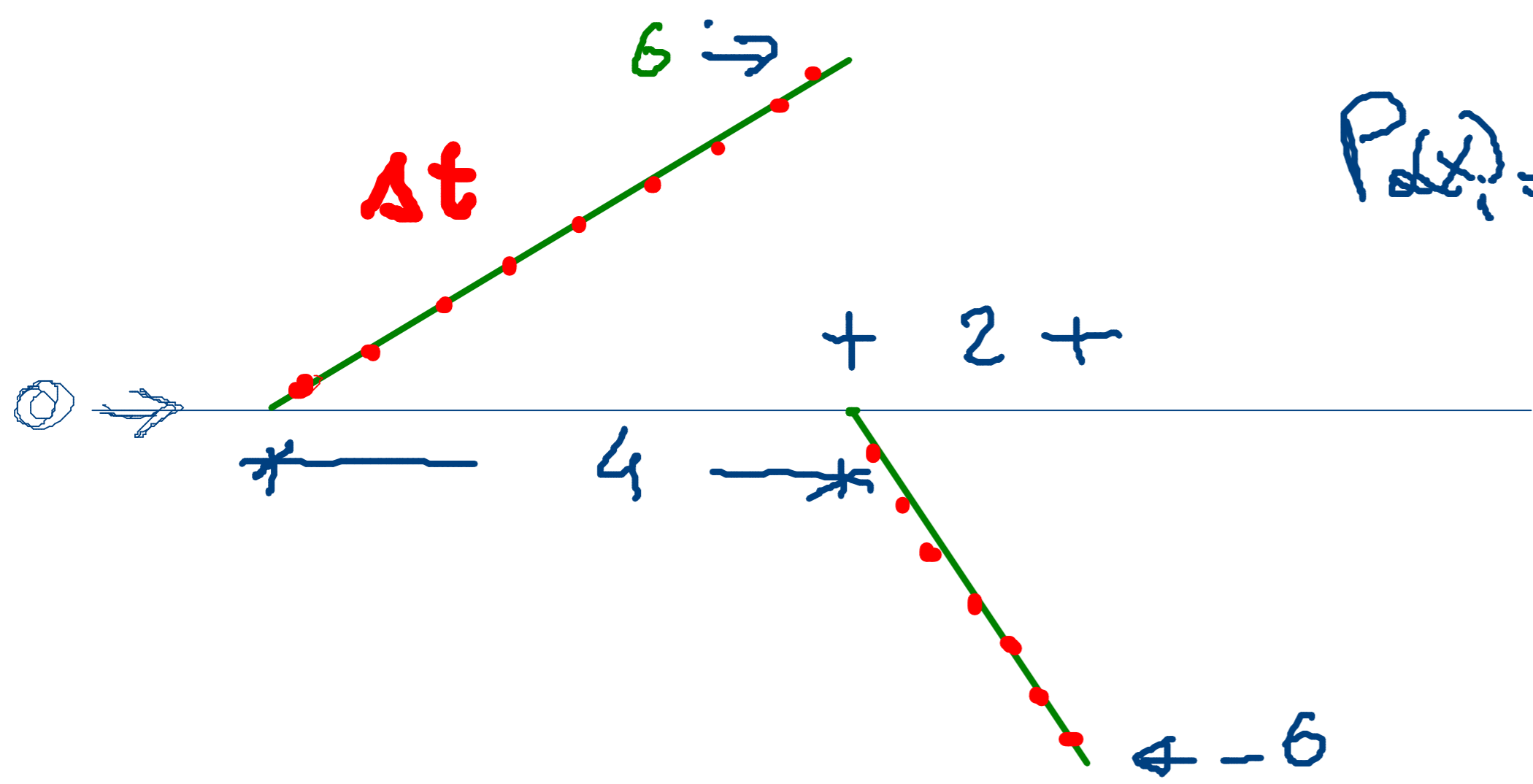
$$P(x < 0) = \frac{t_3}{t_3 + t_4}$$



$$P_a = \int \frac{1}{11} \cdot dx \quad \leftarrow \dots \rightarrow \quad P_a = \int_{-\infty}^x \text{pdf} \cdot dx$$







$$P(x_i) = P(x < x_i)$$

