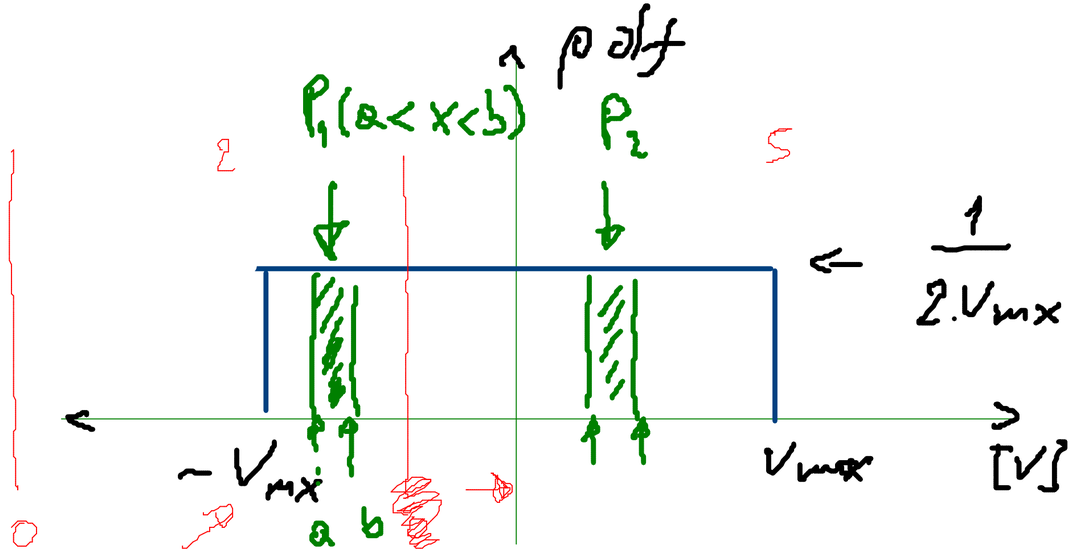
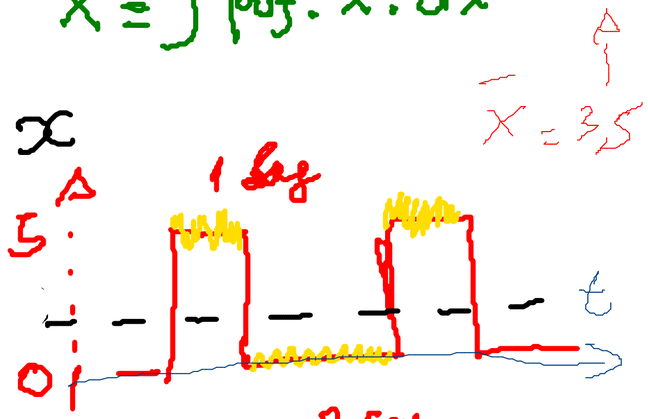


$$P_1 = \int_a^b pdf \cdot dx$$

$$\bar{X} = \int pdf \cdot x \cdot dx$$



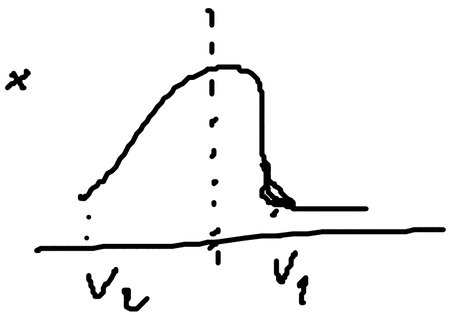
$$\langle x \rangle = \bar{X} = \frac{5}{3} = 1{,}66$$

$$\bar{x} = \int pdf \cdot x \cdot dx \qquad pdf(x) = m \cdot x$$

$$P(x < \bar{x}) = \int_{-\infty}^{\bar{x}} pdf \cdot dx \qquad pdf(x) = \frac{2}{V_{mx}^2} \cdot x$$

$$m = \frac{h}{V_{mx}} = \frac{2}{V_{mx}} \cdot \frac{1}{V_{mx}}$$

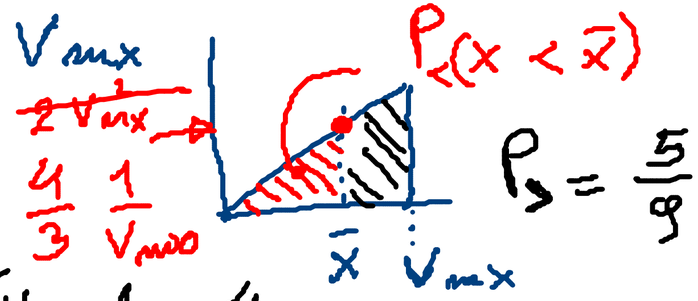
$$\frac{V_{mx} \cdot h}{2} = 1 \rightarrow h = \frac{2}{V_{mx}}$$



$$\bar{x} = \int_0^{V_{mx}} \frac{2}{V_{mx}^2} \cdot x^2 \cdot dx$$

$$= \frac{2}{V_{mx}^2} \cdot \frac{x^3}{3} \Big|_0^{V_{mx}} = \frac{2}{V_{mx}^2} \cdot \frac{V_{mx}^3}{3}$$

$$\bar{x} = \frac{2}{3} V_{mx}$$

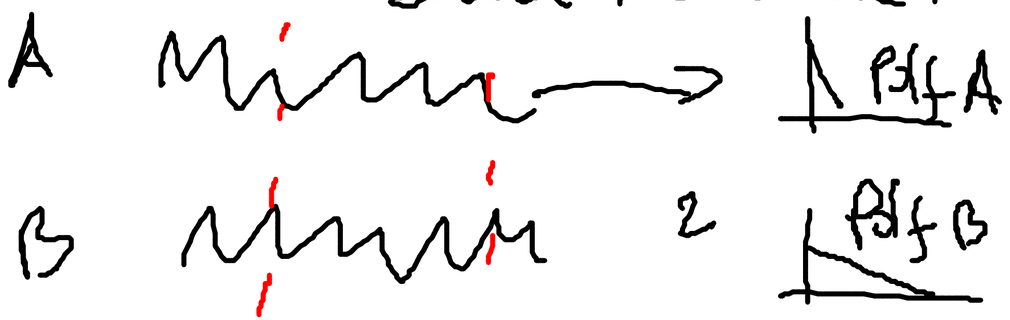


$$P_> = \frac{5}{9}$$

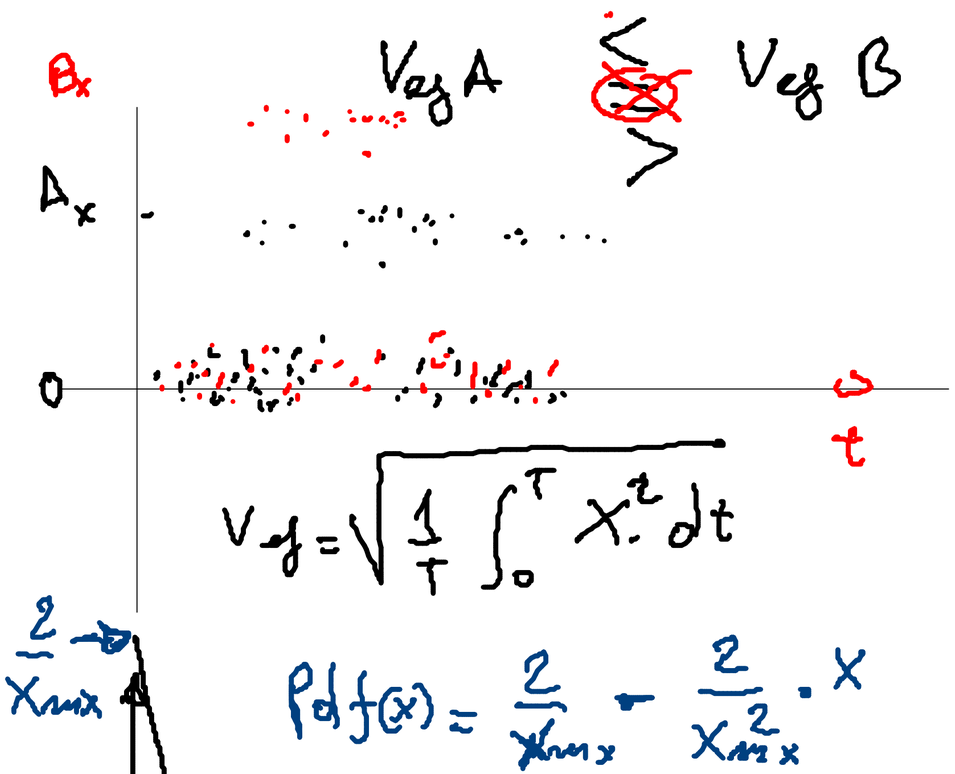
$$P_< = \frac{4}{3} V_{mx} \cdot \frac{2}{3} V_{mx} \cdot \frac{1}{2} = \frac{4}{9}$$

PROCESO E

Señal muestra 1



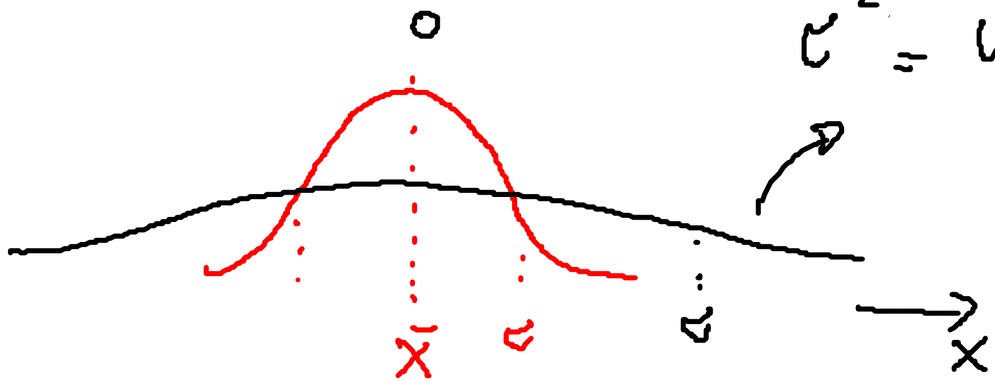
Estacionario



$\langle x^2 \rangle = \overline{X^2} = \int pdf \cdot x^2 \cdot dx$

Proc. Ergódico

Ó... Tengo 1 sola señal muestra



$$\sigma^2 = V_{ac} = \overline{X^2} - \bar{x}^2$$

$$\bar{B} = 1\,V$$

$$\bar{A} = 1\,V$$

$$A_{eg} = \sqrt{\frac{1}{2}\left(1{,}1^2 \cdot 0{,}2 + 0{,}9^2 \cdot 1{,}8\right)} = 1{,}049$$

$$B_{eg} = \sqrt{\frac{1}{2}\left(1{,}1^2 \cdot 1{,}8 + 0{,}1^2 \cdot 0{,}2\right)} = 1{,}044$$

$$A_{eg}AC = \quad \Big\} =$$

$$B_{eg} =$$

A(t)

$$A_g = \sqrt{\frac{1}{T}\int_T A^2 \cdot dt}$$

$$A_g^2 = \frac{1}{5}\sum_{n=1}^{N=5000} A_n^2 \cdot \Delta t$$

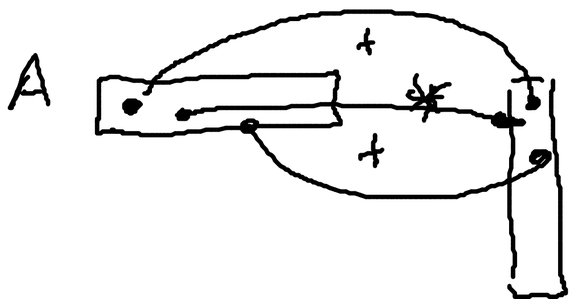
$$A_g^2 = \frac{1}{5} \cdot 0{,}001 \sum A_n^2$$

$$A_g = \sqrt{\dots}$$

$$V_{goc} = STD = \sqrt{\overline{X^2} - \overline{X}^2}$$

$$\sum A^2 = \sum_1^n A_i \cdot A_i$$

$$\bar{A} \cdot \bar{A}$$



A^t =