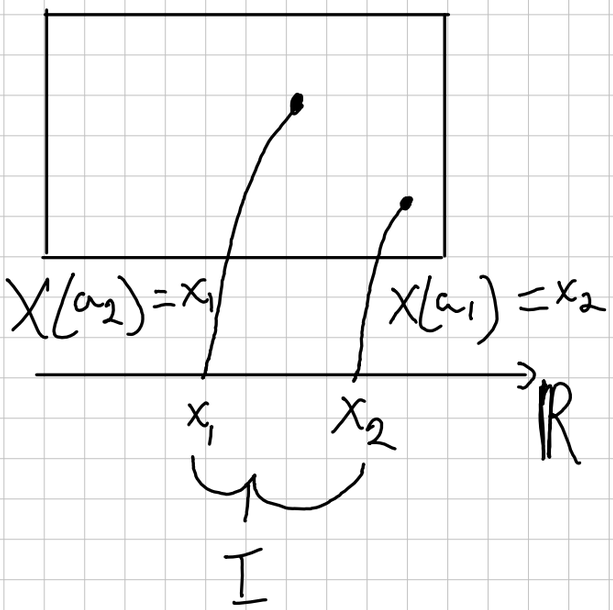
Kontinuerte stokastiske variable

Sample space

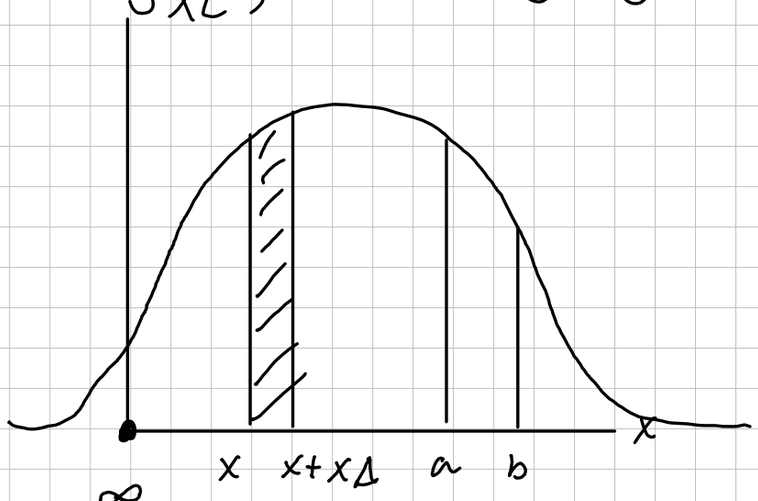


$X: S \to I = \mathbb{R}$

$f_X(x)$: pdf

probability Density Function

$f_X(x)$ ← sandsynlighedstæthed.



$$P(X \in [x_1, x+x\Delta]) = f_X(x)$$

$$P(X \in [a,b]) = \int_a^b f_X(x)dx$$

↑ for at få sandsynlighed

$$\int_{-\infty}^{\infty} f_X(x)dx = 1 \qquad f_X(x) \geq 0$$

$$P(X=x) = \int_a^a f_X(x)dx = 0$$