X variable aléatoire de densité f.

$$P(X \leq a) = \int_{-\infty}^{a} f(x)\,dx$$

$$P(X \geq d) = \int_{d}^{+\infty} f(x)\,dx$$

$$P(e \leq X \leq d) = \int_{e}^{d} f(x)\,dx$$

$$E(X) = \int_{-\infty}^{+\infty} x \cdot f(x)\,dx$$

$$E(X^2) = \int_{-\infty}^{+\infty} x^2 f(x)\,dx$$

$$\mathrm{Var}\,X = E(X^2) - \left(E(X)\right)^2$$

$$\sigma(X) = \sqrt{\mathrm{Var}\,X}$$

fonction de répartition $F : x \to P(X \leq x) = \int_{-\infty}^{x} f(t)\,dt$

$$F'(x) = f(x)$$