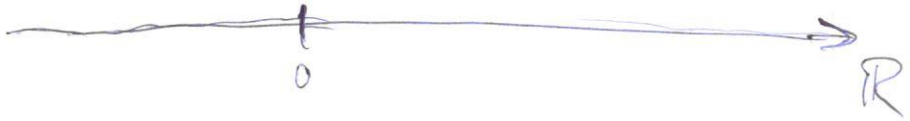
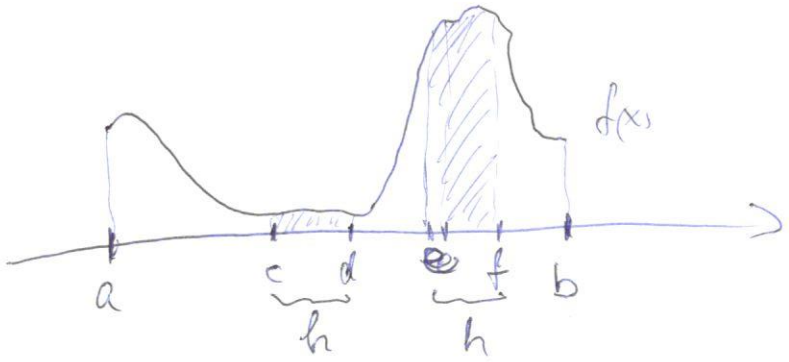
Folytonos eloszlások



$\forall x_0 \in \mathbb{R} \quad \mathbb{P}(X = x_0) = 0$

Mi jellemzi: Δ fv. $f(x)$

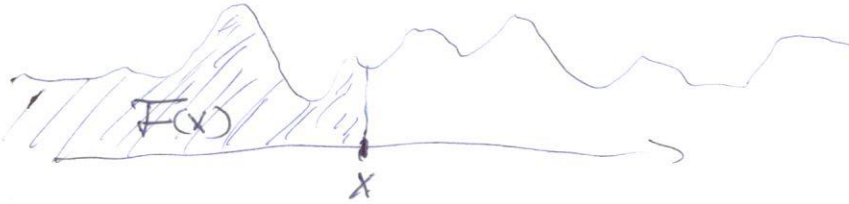


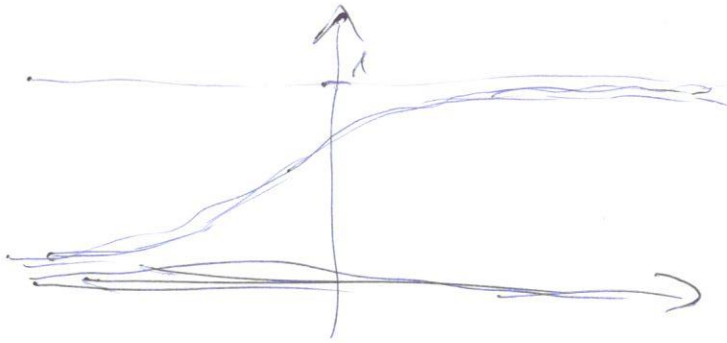
$$\int_a^b f(x)\,dx = 1 \qquad f(x) \geq 0$$

$$\int_{-\infty}^{\infty} f(x)\,dx = 1$$

Eloszlás fv: $F(x)$

$$F(x) = \int_{-\infty}^{x} f(t)\,dt \qquad F'(x) = f(x)$$





$$\mathbb{P}(x \in (a,b)) = \int_a^b f(x)\,dx = F(b) - F(a)$$