

$$norm.f_x(x) = \frac{1}{\sqrt{2\pi\delta}} e^{\left(-\frac{(x-m)^2}{2\delta^2}\right)}$$

$$jedn.f(x) = \begin{cases} \frac{1}{b-a} & a \leq x \leq b \\ 0 & else \end{cases}$$

$$Pois.P(X=k) = \frac{m^k}{k!} e^{-m}, m=np, (m==\lambda)$$

$$Kurt = \frac{\mu_4}{s^4} - 3$$

$$A = \frac{\mu_3}{s^3}$$

$$s = \sqrt{D^2}$$

$$\mu_k = E(X - E(X))^k - moment\ centralny$$

$$\frac{1}{2}(x_1 + x_n) - srodek\ rozstepu$$

$$|max(x) - min(x)| - rozstep$$

$$x : max(P(x)) - dominanta$$

$$E(x) = \sum_{i=1}^n x_i p_i$$

$$D^2(x) = \sum_{i=1}^n (x_i - E(x))^2$$

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

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

$$P(AB) = P(A) * P(B|A)$$

$$P(A) = P(E_1) * P(A|E_1) + P(E_2) * P(A|E_2)$$

$$P(E_1|A) = \frac{P(E_1) * P(A|E_1)}{P(A)}$$

$$P(X < b) = F(b)$$

$$P(X \leq b) = F(b^+)$$

$$P(X \geq b) = 1 - F(b)$$

$$P(X > b) = 1 - F(b^+)$$

$$P(a \leq X < b) = F(b) - F(a)$$

$$P(a < X < b) = F(b) - F(a^+)$$

$$P(a < X \leq b) = F(b^+) - F(a^+)$$

$$P(a \leq X \leq b) = F(b^+) - F(a)$$

$$x + yz = (x + z)(x + y)$$

$$x \bar{+} y = \bar{x} * \bar{y}$$

$$x \bar{*} y = \bar{x} + \bar{y}$$

$$x + x * y = x$$

$$x(x + y) = x$$

$$xy + x \bar{y} = x$$

$$(x + y)(x + \bar{y}) = x$$