

### Rozdělení náhodné veličiny - funkce

	p(x) resp. f(x)	F(x)	M	pozn.
A( $\pi$ )	$\pi^x(1-\pi)^{1-x}$	$\sum_{t \leq x} p(t)$	$x = 0, 1$	$\pi \in (0; 1)$
B(n, $\pi$ )	$\binom{n}{x} \pi^x (1-\pi)^{n-x}$	$\sum_{t \leq x} p(t)$	$x = 0, 1, 2, \dots, n$	$\pi \in (0; 1)$
P( $\lambda$ )	$\frac{e^{-\lambda} \lambda^x}{x!}$ 1)	$\sum_{t \leq x} p(t)$	$x = 0, 1, 2, \dots$	1) p(x) tabelované
Hg(N, M, n)	$\frac{\binom{M}{x} \cdot \binom{N-M}{n-x}}{\binom{N}{n}}$	$\sum_{t \leq x} p(t)$	$x = x_D, \dots, x_H$	$x_D = \max\{0, n+M-N\}$ $x_H = \min\{n, M\}$
R( $\alpha, \beta$ )	$\frac{1}{\beta - \alpha}$	$\frac{x - \alpha}{\beta - \alpha}$	$x \in (\alpha, \beta)$	
E( $\alpha, \delta$ )	$\frac{1}{\delta} e^{-\frac{x-\alpha}{\delta}}$	$1 - e^{-\frac{x-\alpha}{\delta}}$	$x > \alpha$	$\alpha \in \mathbb{R}, \delta > 0$
N( $\mu, \sigma^2$ )	$\frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-\mu)^2}{2\sigma^2}}$	$\frac{1}{\sigma\sqrt{2\pi}} \int_{-\infty}^x e^{-\frac{(t-\mu)^2}{2\sigma^2}} dt$	$x \in \mathbb{R}$	$u = \frac{x-\mu}{\sigma} \sim N(0, 1)$
N(0, 1)	$\frac{1}{\sqrt{2\pi}} e^{-\frac{u^2}{2}}$	$\frac{1}{\sqrt{2\pi}} \int_{-\infty}^u e^{-\frac{t^2}{2}} dt$ 1)	$u \in \mathbb{R}$	1) $\phi(u)$ tabelované
LN( $\mu, \sigma^2$ )	$\frac{1}{x\sigma\sqrt{2\pi}} e^{-\frac{(\ln x - \mu)^2}{2\sigma^2}}$	$\frac{1}{\sigma\sqrt{2\pi}} \int_{-\infty}^x \frac{1}{t} e^{-\frac{(\ln t - \mu)^2}{2\sigma^2}} dt$	$x > 0$	$u = \frac{\ln x - \mu}{\sigma} \sim N(0, 1)$

Pozn. : pro spoj. náh. vel. platí  $f(x) = F'(x)$