

### Šematski prikaz raspodela diskretnog tipa

Raspodela	Skup vrednosti	Prostor parametara	Zakon raspodele	Mat. očekivanje	Disperzija
Bernulijeva	$k \in \{0, 1\}$	$0 < p < 1, q = 1 - p$	$p(k) = p^k q^{1-k}$	$p$	$pq$
Binomna	$k \in \{0, 1, \dots, n\}$	$0 < p < 1, q = 1 - p, n \in \mathbb{N}$	$p(k) = \binom{n}{k} p^k q^{n-k}$	$np$	$npq$
Poasonova	$k \in \{0, 1, 2, \dots\}$	$\lambda > 0$	$p(k) = \frac{\lambda^k}{k!} e^{-\lambda}$	$\lambda$	$\lambda$
Geometrijska	$k \in \{0, 1, 2, \dots\}$	$0 < p < 1, q = 1 - p$	$p(k) = pq^{k-1}$	$\frac{1}{p}$	$\frac{q}{p^2}$

### Šematski prikaz raspodela neprekidnog tipa

Raspodela	Prostor param.	Funkcija gustine	Funkcija raspodele	E(X)	D(X)
Uniformna	$-\infty < a < b < \infty$	$\varphi_X(x) = \begin{cases} \frac{1}{b-a}, & x \in (a, b) \\ 0, & x \notin (a, b) \end{cases}$	$F_X(x) = \begin{cases} 0, & x \leq a \\ \frac{x-a}{b-a}, & a < x \leq b \\ 1, & x > b \end{cases}$	$\frac{a+b}{2}$	$\frac{(b-a)^2}{12}$
Eksponenc.	$a > 0$	$\varphi_X(x) = \begin{cases} 0, & x \leq 0 \\ ae^{-ax}, & x > 0 \end{cases}$	$F_X(x) = \begin{cases} 0, & x \leq 0 \\ 1 - e^{-ax}, & x > 0 \end{cases}$	$\frac{1}{a}$	$\frac{1}{a^2}$
Normalna	$m \in \mathbb{R}, 0 \leq \sigma$	$\varphi_X(x) = \frac{1}{\sigma\sqrt{2\pi}} e^{-\frac{(x-m)^2}{2\sigma^2}}, x \in \mathbb{R}$	$F_X(x) = \frac{1}{\sigma\sqrt{2\pi}} \int_{-\infty}^x e^{-\frac{(t-m)^2}{2\sigma^2}} dt, x \in \mathbb{R}$	$m$	$\sigma^2$