

$X$	$\mathbb{S}_X$	Represents	Parameters	$\mathbb{E}[X]$	$\text{Var}(X)$	$\mathbb{P}(X = i)$
Bernoulli	$\{0, 1\}$	1 for succes, 0 for failure	$p$	$p$	$p(1 - p)$	$\mathbb{P}(X = 0) = 1 - p$ $\mathbb{P}(X = 1) = p$
Binomial	$\{0, \dots, n\}$	number of success in $n$ trials	$n, p$	$np$	$np(1 - p)$	$\mathbb{P}(X = i) = \binom{n}{i} p^i (1 - p)^{n-i}$
Geoemtric	$\{1, 2, \dots\}$	Number of trials till succes	$p$	$\frac{1}{p}$	$\frac{1-p}{p^2}$	$\mathbb{P}(X = i) = p \cdot (1 - p)^{i-1}$