

Distribution	Mean $E[X]$	Variance $Var(X)$	Support
Discrete Distributions			
Bernoulli(p)	p	$p(1-p)$	$x \in \{0, 1\}$
Binomial(n, p)	np	$np(1-p)$	$x \in \{0, 1, \dots, n\}$
Geometric(p)	$\frac{1}{p}$	$\frac{1-p}{p^2}$	$x \in \{1, 2, \dots\}$
Poisson(λ)	λ	λ	$x \in \{0, 1, 2, \dots\}$
Uniform Discrete($\{a, \dots, b\}$)	$\frac{a+b}{2}$	$\frac{(b-a+1)^2-1}{12}$	$x \in \{a, a+1, \dots, b\}$
Continuous Distributions			
Uniform($U(a, b)$)	$\frac{a+b}{2}$	$\frac{(b-a)^2}{12}$	$x \in [a, b]$
Exponential(λ)	$\frac{1}{\lambda}$	$\frac{1}{\lambda^2}$	$x \in (0, \infty)$
Normal($\mathcal{N}(\mu, \sigma^2)$)	μ	σ^2	$x \in (-\infty, \infty)$

Table 1: Mean and Variance of Important Random Variables