

# Lois usuelles

$X \sim$	$\mathcal{B}(p)$	$\mathcal{B}(n, p)$	$\mathcal{G}(p)$	$\mathcal{P}(\lambda)$
	$p \in [0, 1]$	$n \in \mathbb{N}^*, p \in [0, 1]$	$p \in ]0, 1[$	$\lambda \in \mathbb{R}_+^*$
$X(\Omega)$	$\{0, 1\}$	$\llbracket 0, n \rrbracket$	$\mathbb{N}^*$	$\mathbb{N}$
$P(X = k)$	$\begin{cases} P(X = 0) = 1 - p \\ P(X = 1) = p \end{cases}$	$\binom{n}{k} p^k (1 - p)^{n-k}$	$p(1 - p)^{k-1}$	$\frac{\lambda^k}{k!} e^{-\lambda}$
$E(X)$	$p$	$np$	$\frac{1}{p}$	$\lambda$
$V(X)$	$p(1 - p)$	$np(1 - p)$	$\frac{1 - p}{p^2}$	$\lambda$
$G_X(t)$	$1 - p + pt$	$(1 - p + pt)^n$	$\frac{pt}{1 - (1 - p)t}$	$e^{\lambda(t-1)}$