SNOI	
CONTINUOUS DISTRIBUTIONS	

		parameters	fpd	cdf	$\mathrm{E}[X]$	$\operatorname{Var}[X]$	fbm
$Uniform(\alpha,\beta)$ (stand. model $\alpha=0,\beta=1$)	(lpha,eta)	$\alpha < \beta \in \mathbb{R}$	$\frac{1}{\beta-\alpha}$	$\frac{x-\alpha}{\beta-\alpha}$	$\frac{(\alpha+\beta)}{2}$	$\frac{(\beta-\alpha)^2}{12}$	$\frac{e^{\beta t} - e^{\alpha t}}{t(\beta - \alpha)}$
$Exponential(\lambda)$ (stand. model $\lambda = 1$)	+	$\lambda \in \mathbb{R}^+$	$\lambda e^{-\lambda x}$	$1 - e^{-\lambda x}$	$\frac{1}{\lambda}$	$\frac{1}{\lambda^2}$	$\left(\frac{\lambda}{\lambda-t}\right)$
$Gamma(\alpha,\beta)$ (stand. model $\beta=1$)	+	$\alpha, \beta \in \mathbb{R}^+$	$\frac{\beta^{\alpha}}{\Gamma(\alpha)} x^{\alpha - 1} e^{-\beta x}$		$\frac{\alpha}{\beta}$	$rac{lpha}{eta^2}$	$\left(rac{eta}{eta-t} ight)^lpha$
$Weibull(\alpha, \beta)$ (stand. model $\beta = 1$)	+ 選	$lpha,eta\in\mathbb{R}^+$	$lphaeta x^{lpha-1}e^{-eta x^{lpha}}$	$1 - e^{-\beta x^{\alpha}}$	$\frac{\Gamma\left(1+1/\alpha\right)}{\beta^{1/\alpha}}$	$\frac{\Gamma\left(1+\frac{2}{\alpha}\right)-\Gamma\left(1+\frac{1}{\alpha}\right)^2}{\beta^{2/\alpha}}$	
$Normal(\mu, \sigma^2)$ (stand. model $\mu = 0, \sigma = 1$)	出	$\mu \in \mathbb{R}, \sigma \in \mathbb{R}^+$	$\frac{1}{\sqrt{2\pi\sigma^2}} \exp\left\{-\frac{(x-\mu)^2}{2\sigma^2}\right\}$		ή	σ^2	$e^{\{\mu t + \sigma^2 t^2/2\}}$
Student(u)	丝	$ u \in \mathbb{R}^{+} $	$\frac{(\pi\nu)^{-\frac{1}{2}}\Gamma\left(\frac{\nu+1}{2}\right)}{\Gamma\left(\frac{\nu}{2}\right)\left\{1+\frac{x^2}{\nu}\right\}^{(\nu+1)/2}}$		0 (if $\nu > 1$)	$\frac{\nu}{\nu - 2} (\text{if } \nu > 2)$	
Pareto(heta, lpha)	+ K	$\theta, \alpha \in \mathbb{R}^+$	$\frac{\alpha\theta^{\alpha}}{(\theta+x)^{\alpha+1}}$	$1 - \left(\frac{\theta}{\theta + x}\right)^{\alpha}$	$\frac{\theta}{\alpha - 1}$ (if $\alpha > 1$)	$\frac{\alpha\theta^2}{(\alpha-1)^2(\alpha-2)}$ (if $\alpha>2$)	
Beta(lpha,eta)	(0, 1)	$\alpha, \beta \in \mathbb{R}^+$	$\frac{\Gamma(\alpha+\beta)}{\Gamma(\alpha)\Gamma(\beta)}x^{\alpha-1}(1-x)^{\beta-1}$		$\frac{\alpha}{\alpha + \beta}$	$\frac{\alpha\beta}{(\alpha+\beta)^2(\alpha+\beta+1)}$	