

StatsGammaPDF

StatsGammaPDF(x, μ, σ, γ)

The StatsGammaPDF function returns the gamma probability distribution function

$$f(x; \mu, \sigma, \gamma) = \frac{\left(\frac{x-\mu}{\sigma}\right)^{\gamma-1} \exp\left(-\frac{x-\mu}{\sigma}\right)}{\sigma \Gamma(\gamma)}. \quad \begin{aligned} &x \geq \mu \\ &\sigma, \gamma > 0 \end{aligned}$$

where μ is the location parameter, σ is the scale parameter, γ is the shape parameter, and Γ is the gamma function.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsGammaCDF** and **StatsInvGammaCDF**.

StatsGeometricCDF

StatsGeometricCDF(x, p)

The StatsGeometricCDF function returns the geometric cumulative distribution function

$$F(x, p) = 1 - (1 - p)^{x+1}.$$

where p is the probability of success in a single trial and x is the number of trials for $x \geq 0$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsGeometricPDF** and **StatsInvGeometricCDF**.

StatsGeometricPDF

StatsGeometricPDF(x, p)

The StatsGeometricPDF function returns the geometric probability distribution function

$$f(x, p) = p(1 - p)^x,$$

where the p is the probability of success in a single trial and x is the number of trials $x \geq 0$.

See Also

Chapter III-12, **Statistics** for a function and operation overview; **StatsGeometricCDF** and **StatsInvGeometricCDF**.

StatsHodgesAjneTest

StatsHodgesAjneTest [flags] srcWave

The StatsHodgesAjneTest operation performs the Hodges-Ajne nonparametric test for uniform distribution around a circle. Output is to the W_HodgesAjne wave in the current data folder or optionally to a table.

Flags

| | |
|---------------|--|
| /ALPH = val | Sets the significance level (default $val=0.05$). |
| /Q | No results printed in the history area. |
| /SA=specAngle | Uses the Batschelet modification of the Hodges-Ajne test to test for uniformity against the alternative of concentration around the specified angle. $specAngle$ must be expressed in radians modulus 2π . |