Gamma distribution

The gamma distribution is two-parameter family of continuous probability distributions. It is the maximum entropy probability distribution for a random variable X for which E[x] = kθ is fixed and greater than zero, and E[ln(x)] = ψ(k) + ln(θ) is fixed (ψ is the digamma function.)

Cumulative distribution function

$a := \text{curve2d}\left(\text{gammadist}(x , 1 , 2) , x , 0 , 20 , 100\right)$

$b := \text{curve2d}\left(\text{gammadist}(x , 2 , 2) , x , 0 , 20 , 100\right)$

$c := \text{curve2d}\left(\text{gammadist}(x , 3 , 2) , x , 0 , 20 , 100\right)$

$d := \text{curve2d}\left(\text{gammadist}(x , 5 , 1) , x , 0 , 20 , 100\right)$

$e := \text{curve2d}\left(\text{gammadist}(x , 9 , 0.5) , x , 0 , 20 , 100\right)$

$f := \text{curve2d}\left(\text{gammadist}(x , 7.5 , 1) , x , 0 , 20 , 100\right)$

$h := \text{curve2d}\left(\text{gammadist}(x , 0.5 , 1) , x , 0 , 20 , 100\right)$

Name	Title	Color	Origin
a	(1, 2)	--------	
b	(2, 2)	--------	
c	(3, 2)	--------	
d	(5, 1)	--------	
e	(9, 0.5)	--------	
f	(7.5, 1)	--------	
h	(0.5, 1)	--------	

Gamma - Cumulative distribution function