

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 $E[X] = k\theta$ is fixed and greater than zero, and $E[\ln(x)] = \psi(k) + \ln(\theta)$ is fixed (ψ is the digamma function.)

Cumulative distribution function

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

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

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

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

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

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

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

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

