

EXCEL 2010: GAMMA PDF and CDF

$\alpha =$ 1.35358217
 $\beta =$ 153.91751239

X	PDF	CDF
30.4	0.0034	0.0825
278.7	0.0015	0.7385
63.9	0.0035	0.2000
387.1	0.0008	0.8595
330	0.0011	0.8046
187.3	0.0023	0.5676
495.9	0.0004	0.9259
18	0.0030	0.0425
163.3	0.0026	0.5089
128.8	0.0030	0.4133

- If $x < 0$, GAMMA.DIST returns the #NUM! error value.
- If $\alpha \leq 0$ or if $\beta \leq 0$, GAMMA.DIST returns the #NUM! error value.
- The equation for the gamma probability density function is:

$$f(x; \alpha, \beta) = \frac{1}{\beta^\alpha \Gamma(\alpha)} x^{\alpha-1} e^{-\frac{x}{\beta}}$$

The standard gamma probability density function is:

$$f(x; \alpha) = \frac{x^{\alpha-1} e^{-x}}{\Gamma(\alpha)}$$