#### EXPONDIST

[Syntax](Syntax.docx):

EXPONDIST ( x , lambda , cumulative-flag )

Description: Computes the exponential distribution.

Mathematical Formula:

The equation for the probability density function is:



The equation for the cumulative distribution function is:



Arguments:

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| [x](x.docx) | number | The value of the function. |
| lambda | number | The [parameter](parameter.docx) value. |
| cumulative-flag | logical | Determines the form of the function. If [TRUE](TRUE.docx), EXPONDIST returns the cumulative distribution function; if [FALSE](FALSE.docx), EXPONDIST returns the probability density function. |

Return Type and Value: number – The exponential distribution.

However, if

* x < 0, #NUM! [is](is.docx) returned.
* lambda ≤ 0, #NUM! [is](is.docx) returned.

[Example:

EXPONDIST(0.2,10,FALSE) results in 1.353352832
EXPONDIST(2.3,1.5,TRUE) results in 0.968254364

end example]