

How can I use the BETA.INV function in Google Sheets?

Authored by
stats writer

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The BETA.INV function in Google Sheets is a statistical function that calculates the inverse of the cumulative beta probability distribution. This allows users to determine the value at which a certain probability level is exceeded in a beta distribution. To use this function, the user must provide the probability level and the two shape parameters of the beta distribution. The function then returns the value at which the desired probability level is exceeded. This can be useful for analyzing data that follows a beta distribution, such as in market research or quality control. By using the BETA.INV function in Google Sheets, users can easily calculate and analyze the probability distribution of their data.

BETA.INV function

The BETA.INV function returns the value of the inverse beta distribution function for a given probability.

Parts of a BETA.INV function

BETA.INV(probability, alpha, beta, lower_bound, upper_bound)

Part	Description	Notes
probability	The probability at which to evaluate the function.	Must be between 0 and 1, inclusive.
alpha	The first shape parameter of the distribution.	Must be positive.
beta	The second shape parameter of the distribution.	Must be positive.
lower_bound	Lower bound of the original beta distribution's domain.	Default value is 1.
upper_bound	Upper bound of the original beta distributions's domain.	Default value is 1.

Sample formulas

BETA.INV(0.65,1.234,7,1,3)

BETA.INV(0.3,5,1)

BETA.INV(A4,3,2,-1,1)

Example

If you want to know the value of inverse cumulative beta function at probability 0.13, parameterize it by alpha = 5, beta = 1, and domain .

	A	B	C	D	E	F	G
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1	Formula	Probability	Alpha	Beta	Lower bound	Upper bound	Result
2	=BETA.INV(0.13, 5, 1, -1, 1)	0.13	5	1	-1	1	0.33

Related functions

BETA.DIST: The BETA.DIST function returns the probability of a given value as defined by the beta distribution function.