

# How can I use the CHIINV function in Google Sheets?

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## RECOMMENDED CITATION

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PSYCHOLOGICAL SCALES. Retrieved from <https://scales.arabpsychology.com/?p=162055>

The CHIINV function in Google Sheets is a statistical tool that allows users to calculate the inverse of the chi-square cumulative distribution. This function is useful in analyzing data and determining the probability of a certain event occurring. To use the CHIINV function, users must input the probability and degrees of freedom values. The result will be the critical value for the specified probability and degrees of freedom, which can then be used in various statistical analyses. This function is beneficial for users who need to perform statistical calculations in Google Sheets and can aid in making data-driven decisions.

## CHIINV

Calculates the inverse of the right-tailed chi-squared distribution.

### Sample Usage

```
CHIINV(0.42, 2)
```

```
CHIINV(A2, B2)
```

### Syntax

```
CHIINV(probability, degrees_freedom)
```

**probability** - The probability associated with the right-tailed chi-squared distribution.

Must be greater than 0 and less than 1.

**degrees\_freedom** - The number of degrees of freedom of the distribution.

### Notes

**degrees\_freedom** is truncated to an integer if a non-integer is provided.

**degrees\_freedom** must be at least 1.

All arguments must be numeric.

CHIINV is synonymous with CHISQ.INV.RT.

### See Also

CHIDIST: Calculates the right-tailed chi-squared distribution, often used in hypothesis testing.

**CHISQ.INV**: Calculates the inverse of the left-tailed chi-squared distribution.

**CHISQ.INV.RT**: Calculates the inverse of the right-tailed chi-squared distribution.

**CHITEST**: Returns the probability associated with a Pearson's chi-squared test on the two ranges of data. Determines the likelihood that the observed categorical data is drawn from an expected distribution.

**FINV**: Calculates the inverse of the right-tailed F probability distribution. Also called the Fisher-Snedecor distribution or Snedecor's F distribution.

**TINV**: Calculates the inverse of the two-tailed TDIST function.

## Example

Suppose you want to find the cutoff for the chi-squared statistic associated with a p-value of 0.05. With 4 degrees of freedom, you can consider any chi-squared statistic larger than 9.49 to be statistically significant.

	A	B	C
1	Probability	Degrees freedom	Solution
2	0.05	4	9.487729037
3	0.05	4	=CHIINV(0.05, 4)
4	0.05	4	=CHIINV(A2, B2)