How can I use the IMCOT function in Google Sheets?

Authored by

stats writer

June 29, 2024

The IMCOT function is a useful tool in Google Sheets that allows users to quickly and easily convert a given number into its corresponding complex number in trigonometric form. This function can be accessed by typing "=IMCOT()" in a cell and entering the desired number as the function's argument. It can be used in various mathematical and engineering applications, such as calculating impedance or analyzing circuit diagrams. By utilizing the IMCOT function, users can efficiently perform complex calculations and save time in their data analysis.

IMCOT function

The IMCOT function returns the cotangent of the given complex number. For example, a given complex number "x+yi" returns "cot(x+yi)."

Parts of an IMCOT function

`IMCOT(number)`

Part	Description	Notes
`number`	The complex number for which you want the cotangent.	This can be either the result of the COMPLEX function, a real number interpreted as a complex number with imaginary parts equal to 0, or a string in the format "x+yi" where x and y are numeric.

Sample formulas

`IMCOT(COMPLEX(4,6))`

`IMCOT(4)`

`IMCOT("2+3i")`

Notes

The `IMCOT` function returns an error if the given number isn't a valid complex number.

Examples

	A	B
1	**Formula**	**Results**
2	`=IMCOT(COMPLEX(4,1))`	0.253182007063936-0.928132757303418i
3	`=IMCOT(3.5)`	2.66961648496887

4	`=IMCOT("3+2i")`	-0.0106047834703371-1.035746637765i

Related functions

IMTAN: The IMTAN function returns the tangent of the given complex number.

IMCOTH: The IMCOTH function returns the hyperbolic cotangent of the given complex number.

COMPLEX: The COMPLEX function creates a complex number, given real and imaginary coefficients.