How can I use the IMSIN function in Google Sheets?

Authored by

stats writer

June 29, 2024

The IMSIN function in Google Sheets is a useful tool for performing mathematical calculations involving complex numbers. It allows users to find the sine of a complex number by inputting the real and imaginary parts of the number. This function can be particularly helpful in solving complex equations or analyzing data sets that involve complex numbers. To use the IMSIN function, simply enter the function name in a cell, followed by the real and imaginary numbers enclosed in parentheses. The function will then return the sine of the complex number, which can be further used in other calculations or displayed in a separate cell. This function is a powerful tool for users looking to streamline their complex number calculations in Google Sheets.

IMSIN function

The IMSIN function returns the sine of the given complex number. For example, a given complex number "x+yi" returns "sin(x+yi)."

Parts of an IMSIN function

```
IMSIN (number)
```

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

Sample formulas

```
IMSIN(COMPLEX(4,6))
```

```
IMSIN(4)
```

```
IMSIN("2+3i")
```

Notes

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

Examples

	A	B
1	**Formula**	**Result**

	A	B
2	=IMSIN(COMPLEX(4,1))	-1.16780727488952-0.768162763456573i
3	=IMSIN(3.5)	-0.35078322768962
4	IMSIN=("3+2i")	0.53092108624852-3.59056458998578i

Related functions

IMCOS: The IMCOS function returns the cosine of the given complex number.COMPLEX: The COMPLEX function creates a complex number, given real and imaginary coefficients.