How do I calculate the inverse hyperbolic sine (IMSINH) function in Excel?

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The inverse hyperbolic sine (IMSINH) function in Excel is a mathematical function used to calculate the inverse value of the hyperbolic sine of a given number. This function can be used to solve equations involving hyperbolic sine and to find the input value that would result in a specific output value. To use the IMSINH function, simply enter the desired number as the argument and the function will return the inverse hyperbolic sine value. This function can be useful in various fields such as engineering, finance, and statistics. It is a powerful tool in Excel that allows for efficient and accurate calculations.

The IMSINH function returns the hyperbolic sine of a complex number in x+yi or x+yj text format.

Syntax

IMSINH(inumber)

The IMSINH function syntax has the following arguments.

inumber Required. A complex number for which you want the hyperbolic sine.

Remarks

You can use the COMPLEX function to convert real and imaginary coefficients into a complex number.

If inumber is a value that is not in the x+yi or x+yj text format, IMSINH returns the #NUM! error value.

If inumber is a logical value, IMSINH returns the #VALUE! error value.

Example

Formula	Description	Result
=IMSINH("4+3i")	Returns the hyperbolic sine of a complex number: 4+3i.	-27.0168132580039+3.85373803791938i