

# How do I calculate the hyperbolic cosine of a number in Excel?

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## RECOMMENDED CITATION

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Calculating the hyperbolic cosine of a number in Excel can be done using the COSH function, which stands for "cosine hyperbolic." This function takes a numerical value as its argument and returns the hyperbolic cosine of that number. To use the COSH function, simply enter "=COSH(x)" in a cell, where "x" is the number you want to calculate the hyperbolic cosine of. This will give you the result in decimal form. Alternatively, you can use the COS function to calculate the hyperbolic cosine in radians. Both of these functions can be found in the "Formulas" tab under the "Math & Trig" category. Remember to always use parentheses when entering a number as an argument in a function. By using these functions, you can easily calculate the hyperbolic cosine of any number in Excel.

This article describes the formula syntax and usage of the IMCOSH function in Microsoft Excel.

## Description

Returns the hyperbolic cosine of a complex number in  $x+yi$  or  $x+yj$  text format.

## Syntax

IMCOSH(inumber)

The IMCOSH function syntax has the following arguments.

**Inumber** Required. A complex number for which you want the hyperbolic cosine.

## Remarks

Use COMPLEX 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, IMCOSH returns the #NUM! error value.

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