How do I use the IMEXP function in Excel?

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June 30, 2024

The IMEXP function in Excel is a mathematical function that calculates the exponential value of a complex number. To use this function, you need to input the real and imaginary components of the complex number as arguments. The function then returns the exponential value of the complex number, which can be used in various calculations. This function can be particularly useful in financial, scientific, and engineering applications. To use the IMEXP function, simply enter the function name followed by the real and imaginary components of the complex number in the designated cells. It is important to note that the IMEXP function is only available in newer versions of Excel and may not be compatible with older versions. Additionally, if the function returns an error, it may be due to an invalid input or the use of the incorrect function. Overall, the IMEXP function can help simplify complex calculations involving exponential values of complex numbers in Excel.

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

Description

Returns the exponential of a complex number in x + yi or x + yj text format.

Syntax

IMEXP(inumber)

The IMEXP function syntax has the following arguments:

Inumber Required. A complex number for which you want the exponential.

Remarks

Use COMPLEX to convert real and imaginary coefficients into a complex number.

The exponential of a complex number is:

$$\mathrm{IMEXP}(z) = e^{(x+yi)} = e^{x}e^{yi} = e^{x}(\cos y + i\sin y)$$