How can I use the IMDIV function in Excel to divide two complex numbers and return the quotient in the form of a complex number?

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The IMDIV function in Excel is a mathematical tool that allows users to divide two complex numbers and return the resulting quotient in the form of a complex number. This function is useful for performing calculations involving complex numbers, which are numbers that contain both a real and imaginary component. By using the IMDIV function, users can easily and accurately divide complex numbers without having to manually separate their real and imaginary parts. This simplifies complex number calculations and allows for quicker and more precise results. To use the IMDIV function, simply input the two complex numbers to be divided and the function will automatically compute the quotient in complex number form.

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

Description

Returns the quotient of two complex numbers in x + yi or x + yj text format.

Syntax

IMDIV(inumber1, inumber2)

The IMDIV function syntax has the following arguments:

Inumber1 Required. The complex numerator or dividend.

Inumber2 Required. The complex denominator or divisor.

Remarks

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

The quotient of two complex numbers is:

$$\mathrm{IMDIV}(z_1, z_2) = \frac{(a+bi)}{(c+di)} = \frac{(ac+bd)+(bc-ad)i}{c^2+d^2}$$