#### MULTINOMIAL

[Syntax](Syntax.docx):

MULTINOMIAL ( argument-list )

Description: Computes the ratio of the factorial of the sum of the values in argument-list to the product of the factorials.

Mathematical Formula:

The multinomial is:

Equation

Arguments:

|  |  |  |
| --- | --- | --- |
| Name | Type | Description |
| argument-list | number | The arguments in argument-list designate the numerical values for which the multinomial is desired. |

Return Type and Value: number – The ratio of the factorial of the sum of the values in argument-list to the product of the factorials.

However, if any argument is less than zero, #NUM! is returned.

[Example:  
  
MULTINOMIAL(2) results in 1  
MULTINOMIAL(2,3) results in 10  
MULTINOMIAL(2,3,4) results in 1260  
  
end example]