

# GROUPANOVA

## Syntax

GROUPANOVA(<string|integer>, <integer|float > ;<float>)

## Description

This function is for comparing the means of three or more samples to see if they are significantly different at a certain significance level (usually alpha=0.05).

A JSON object is returned with the calculated F-statistic, the degrees of freedom between the groups, the degrees of freedom with in the groups, the P-value, and a statement if the difference is significant or not.

This is an [aggregate function](#).

The function arguments are:

- Sample ID column
- Value column
- Significance level constant (optional)

## Example

Example input sheet:

Experiment	Sample_ID	Value
A	x	12
A	x	15
A	x	9
A	y	20
A	y	19
A	y	23
A	z	40
A	z	35
A	z	42

Using GROUPBY(#input!Experiment) and

GROUPANOVA(#input!Sample\_ID;#input!value;0.05)

Experiment	GROUPANOVA returns
A	{"f-statistic":64.95,"dfbg":2,"dfwg":6,"isSignificant":true}