

One-Way Analysis of Variance for Independent or Correlated Samples

1: Enter the number of your categories (e.g., 3).

2: Select "Independent Samples."

3: Do not select either of these options (the default is "Weighted," which is what you want).

4: Copy and paste in your data. Consider "Sample 1," "Sample 2," "Sample 3," etc. your three (or four) categories.

5: Click "Calculate."

These are the **Ns** of your categories.

These are the **Means** of your categories.

These are the **Standard Deviations** of your categories.

	Samples					Total
	1	2	3	4	5	
N	50	50	50			150
ΣX	252647	260536	252421			765604
Mean	5052.94	5210.72	5048.42			5104.0267
ΣX^2	13428208	14103829	13203772			40735810
Variance	1351239.3	1077608.8	939795.47			1113542.3
Std.Dev.	1162.4282	1038.0794	969.4305			
Std.Err.	164.3922	146.8066	137.0982			

This is the variance in your dependent variable that is **explained** by your independent variable.

This is your **F-ratio.**

This is your **p-value.**

Source	SS	df	MS	F	
Treatment [between groups]	854270.8133	2	427135.4067	0.38	0.684531
Error	165063539.0	147	1122881.218		
Ss/Bl					
Total	1659178				

This is the variance in your dependent variable that is **unexplained** by your independent variable.