a. What are the assumptions of ANOVA, test it out?

b. Why ANOVA test? Is there any other way to answer the above question?

* Independence of cases – this is an assumption of the model that simplifies the statistical analysis.
* Normality – the distributions of the residuals are normal.
* Equality (or "homogeneity") of variances, called homoscedasticity

The one-way analysis of variance (**ANOVA**) is **used** to determine whether there are any statistically significant differences between the means of two or more independent (unrelated) groups (although **you** tend to only see it **used** when there are a minimum of three, rather than two groups).