If you find an F ratio of 1.0 in a one-factor ANOVA, it means that

a. Between-groups variation exceeds within-groups variation.

b. Within-groups variation exceeds between-groups variation.

c. Between-groups variation is equal to within-groups variation.

d. Between-groups variation exceeds total variation.

Step 1: Answer

C) between group variation is equal to within group variation

Step 2:

The statistical technique known as analysis of variance, or ANOVA, divides observed variance data into distinct components for use in further testing. When there are three or more data groups, a one-way ANOVA is used to find out how the dependent and independent variables are related. ANOVA is a statistical method used to determine whether the means of two or more groups differ from one another significantly. By comparing the means of various samples, an ANOVA analyses the influence of one or more factors. F is around one. Because the F-ratio is a ratio of two variances, and variances are always positive, F-ratios are always positive.