

26-11-2025

The following data show the number of worms quarantined from the GI areas of four groups of muskrats in a carbon tetrachloride anthelmintic study. Conduct a two-way ANOVA test.

I	II	III	IV
338	412	124	389
324	387	353	432
268	400	469	255
147	233	222	133
309	212	111	265

Solution:

<i>Source of Variation</i>	<i>Sum of Squares</i>	<i>Degrees of Freedom</i>	<i>Mean Square</i>
<i>Between the groups</i>	62111.6	8	9078.067
<i>Within the groups</i>	98787.8	16	4567.89
<i>Total</i>	167771.4	24	

$$\text{Since } F = MST / MSE$$

$$= 9.4062 / 3.66$$

$$F = 2.57$$