JxK Factorial Design

**TEST**
The means are the same for all JK treatments.  
\[ H_0: \tau_{jk} = 0 \text{ for all } j \text{ and } k \]

Reject \( H_0 \)?  

---NO---

There is not enough evidence to warrant further analysis of this data.

---YES---

**TEST**  
Factors A and B do not interact to affect the mean response.  
\[ H_0: (\alpha\beta)_{jk} = 0 \text{ for all } j \text{ and } k \]

Reject \( H_0 \)?  

---YES---

Do appropriate comparisons for the treatment means, \( \mu_{jk} \).

---NO---

**TEST**  
The mean response is the same for all levels of factor A.  
\[ H_0: \alpha_j = 0 \text{ for all } j \]

Reject \( H_0 \)?  

---NO, STOP.---

YES

Do pair-wise comparisons of the means for the levels of factor A, \( \mu_j \).

**TEST**  
The mean response is the same for all levels of factor B.  
\[ H_0: \beta_k = 0 \text{ for all } k \]

Reject \( H_0 \)?  

---YES---

Do pair-wise comparisons of the means for the levels of factor B, \( \mu_k \).