In-Video Quiz Questions for
Unit 4, Part 3: (4) Multiple comparisons

(02:18)

1. If the explanatory variable in an ANOVA has 3 levels, and the F-test in ANOVA yields a significant result, how many pairwise comparisons are needed to compare each group to one another?

   (a) 2
   (b) 3
   (c) 6
   (d) 9
   (e) 12

(06:48)

2. What does it mean to reject the null hypothesis in this example?

   The data provide convincing evidence that

   (a) at least one pair of means are different from each other.
   (b) all means are different from each other.
   (c) average vocabulary scores of self-identified middle and lower class Americans are different.
   (d) none of the means are different from each other.
   (e) average vocabulary scores of self-identified middle class Americans is different from means of all other groups.

Data Analysis and Statistical Inference
Dr. Çetinkaya-Rundel
Duke University

Answers:

1. b

Explanation: K = k (k-1) / 2 = 3 * 2 / 2 = 3

2. c

Explanation: This is the conclusion of a pairwise test – testing differences between means of two groups.