

EPRS854
Sample Items for Midterm

1. In one-way ANOVA, rejection of the overall null hypothesis indicates that
 - a. at least one population mean differ from others.
 - b. at least several population means differ from each other.
 - c. at least some population means are equal.
 - d. all population means are different.

2. ANOVA is least robust when
 - a. the group with the smallest sample size is associated with the smallest variance.
 - b. the group with the smallest sample size is associated with the largest variance.
 - c. the group with the smallest mean is associated with the smallest variance.

3. Which of the following does not result in increasing power?
 - a. Stringent α .
 - b. Larger Type I error rate.
 - c. Selection of homogeneous subjects.
 - d. Use of ANCOVA instead of ANOVA.

4. The larger the F ratio, the more likely to
 - a. reject the H_0 .
 - b. fail to reject the H_0 .
 - c. violate the homoscedasticity assumption.
 - d. violate the independence assumption.

5. Suppose, in a two-way analysis of variance, based on 15 cases per cell, the indicated cell means were observed. We might expect to find that there will be a significant
 - a. main effect for factor 1.
 - b. main effect for factor 2.
 - c. main effect for factor 1 and factor 2.
 - d. interaction effect.

Factor 2	Factor 1	
	Level 1	Level 2
Level 1	mean=50	mean=80
Level 2	mean=20	mean=50