

## Answers

1. The hypothesis being tested is that there is no difference in funding allocations among the Black Student Union, the Kinesiology Student Association, the Math Club, and the Social Work Organization.
2. Black Student Union = \$11.70; Kinesiology Student Association = \$17.41; Math Club = \$13.39; Social Work = \$19.15.
3. Black Student Union = \$12.47; Kinesiology Student Association = \$19.65; Math Club = \$16.11; Social Work = \$22.22.
4. The Student Group is the between variability, and of course, we have error variability.
5.  $F = 7.96$
6. 
$$\frac{2436.95}{306.14} = 7.96$$
7.  $\eta_p^2 = .038$ . This means that 3.8% of the variability in funding allocations is accounted for by the student organization.
8. With  $df_{\text{between}} = 3$ ,  $df_{\text{error}} = 609$ , and an alpha level of .05, our critical value is between 2.60 and 2.65.
9. With the output saying  $p = .000$ , we report  $p < .001$ . In other words, there is less than a 0.1% chance that the differences among the means emerged due to random variation.
10. Because our  $F$  ratio exceeds the critical value, the null hypothesis was rejected.
11. After examining the pairwise comparisons, we determined that the Black Student Union was awarded less money than both the Kinesiology Student Association and Social Work Organization. Also, the Math Club was awarded less money than the Social Work Organization.
12. The Black Student Union was awarded less money than the Kinesiology Student Association and the Social Work Organization, respectively. Furthermore, the Math Club was awarded less money than the Social Work Organization.
13. The one-way, repeated-measures ANOVA revealed that there was a significant difference in funds allocated to the four student organizations,  $F(3, 609) = 7.96$ ,  $p < .01$ ,  $\eta_p^2 = .038$ . Bonferroni-corrected multiple comparisons revealed that the Black Student Union ( $M = 11.70$ ,  $SD = 12.47$ ) was awarded less money than the Kinesiology Student Association ( $M = 17.41$ ,  $SD = 19.65$ ),  $p = .001$ , and the Social Work Organization ( $M = 19.15$ ,  $SD = 22.22$ ),  $p < .001$ , respectively. In addition, the Math Club ( $M = 13.39$ ,  $SD = 16.10$ ) was awarded less money than the Social Work Organization,  $p = .023$ . No other comparisons were significant.