

Assignment 6

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Winter, 2019

due: Feb 28, 2019

The following data are from a completely randomized between-subjects design:

1	2	3
48	59	68
54	46	62
47	49	53
54	63	59
62	38	67
57	58	71

1. Perform an ANOVA including tests of the homogeneity of variance assumption and the normality assumption. Test the normality assumption on combined data. Report the results of the omnibus F-test. What can you conclude from this test? (3 points)
2. Perform follow-up tests on the data assuming that your *a priori* hypothesis was that the mean of group 3 should be higher than both group 1 and group 2. If you correct for type-I error, justify this and explain your choice of type-I error correction method. What can you conclude from your tests? (2 points)
3. Assume you had no *a priori* hypothesis about which groups ought to differ, and perform all possible pairwise tests of the difference between means. If you correct for type-I error, justify this and explain your choice of type-I error correction method. What can you conclude from your tests? (2 points)