

King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
STAT-212-Term181
Quiz #3-30/9/2018

Name:

ID:

Serial:

A manager is considering the purchase of new production equipment to improve the output of the plant. Suppose the equipment from two suppliers is extensively tested in multiple production runs. A total of 20 runs are recorded on Supplier A's equipment and another 15 runs are reported from Supplier B's equipment. The volume produced is recorded for each of the 35 runs. The results are summarized in the table below.

	Supplier A	Supplier B
Sample means	110	125
Sample standard deviation	10	15

- a. Do you think that there is a difference in the population variances for Supplier A and B?
- b. Use the 0.01 significance level, do you think that the output improved?