KFUPM	Term 111		Date: 19/12/2011
Mathematics & Statistics	STAT 319		Duration: 25 minutes
	Quiz# 5		
Name:	ID #:	Section 6	Serial #:

Q1 A random sample of 25 bags of popcorn weighed on average 5.39 ounces with a standard deviation of 0.24 ounces.

a. At 5% level of significance, test the claim that the true average weight of the popcorn bag is less than 5.5 ounces.

b. What assumptions you needed to complete the test?

c. Construct a 99% C.I. for the true average weight of the popcorn bag?

P.T.O. →

d. Using the CI obtained in part (c), test the hypothesis in part (a) again. Compare your findings to part a.

e. If you wanted to test that the mean weight of the popcorn bag is different from 5.5 ounces, and the sample resulted an a non-rejection region of [5.37 , 5.63], find the level of significance of this test.

f. Calculate β, if the true mean weight is 5.3.

With My Best Wishes