King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
STAT-211-Term101-A
Quiz #6

Name: ID: Section: Serial:

Question One (2 + 2 + 3 + 5 = 10 -Points)

If the weekly demand for cases of soda at a store is normally distributed with a mean of 47.6 cases and a standard deviation of 5.8 cases,

a. What is the expected value of the sample mean?

b. What is the standard deviation of the sample mean?

c. What is the shape of the sampling distribution of the sample mean?

d. What is the probability that the average demand for a sample of 10 stores will exceed 50 cases in a given week?