KING FAHD UNIVERSITY OF PETROLEUM & MINERALS DEPARTMENT OF MATHEMATICS & STATISTICS Term 172 STAT 319 Quiz #3

Name:

ID #:

- 1) The times of failure of a jet printer are approximately normally distributed with mean of 155 hours and a standard deviation of 200 hours.
 - a) What fraction of these printers will fail before 1000 hours?

b) What should be the guarantee time for these printers if the manufacturer wants only 5% to fail within the guarantee period?

- 2) One-hour carbon monoxide concentration in air samples from a large industrial city average 12 ppm, with a standard deviation of 9 ppm.
 - a) Find the probability that the average concentration in 100 specimens selected randomly will exceed 14 ppm.