

King Fahd University of Petroleum & Minerals
Department of Mathematics & Statistics
STAT-319-Term181
Quiz #3-10-23/10/2018

Name: _____

ID: _____

Serial: _____

Q 1: The average monthly sales of 5,000 firms are normally distributed with mean Rs 36,000 and standard deviation Rs 10,000.

1. What is the number of firms with sales between Rs 30,000 and Rs 40,000?
2. What is the monthly sale that is 80% of sales above this value?

Q 2: A manufacturer claims that the average life of its light bulb is 1,100 hours.

1. What is the probability that a light bulb will live more than 1,080 hours?
2. Find the median lifetime.
3. If five light bulbs selected randomly, what is the probability that at most one light bulb will live more than 1,080 hours?