

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS & STATISTICS
STAT 211.02 Quiz #6

Name: _____ ID #: _____

1) The profit from an investment is normally distributed with a mean of SR 11,200 and a standard deviation of SR 8250.

a) What is the probability that the profit will be between SR 10,000 and SR 15,000?

b) Find the amount, x , such that the profit will exceed x is 25%.

c) What is the probability that there will be a loss rather than a profit?

2) The life of a laptop computer is exponentially distributed with an average mean of 38 months.

a) What is the probability that a computer will fail within 12 months?

b) If the company gives a warranty of 2 years, what proportion of laptops will fail during the warranty period?