

KING FAHD UNIVERSITY OF PETROLEUM & MINERALS
DEPARTMENT OF MATHEMATICS & STATISTICS
STAT 213 Quiz #1

Name:

ID #:

1) The following data are returns on a sample of 15 stocks

12.5, 13, 14.8, 11, 16.7, 9, 8.3, -1.2, 3.9, 15.5, 16.2, 18, 11.6, 10, 9.5

i) Draw a stem and leaf plot, and interpret it

ii) Find the 55th percentile, and interpret it.

iii) Find the mean and the standard deviation, write down the formula for each and compute its value.

iv) Do the data satisfy the empirical rule? Explain

v) What does Chebyshev's Inequality say within 1.5 standard deviations from the mean?

vi) Do the data satisfy the condition of Chebyshev's above? Explain

2) Bonus Question:

The histogram below shows the grades on a quiz, approximate the mean of the quiz by giving a general reasonable formula, and justify it.

