

Quiz 1 for Statistics 301
Elementary Statistical Methods - Fall 2000
Material Covered: Chapter 3 of Workbook and text
For: Friday, 8th September

This is a 15 minute quiz, worth 5% and marked out of 5 points. The total possible points awarded for each question is given in square brackets at the beginning of each question.

Name (please print): _____ . ID Number: _____
last first

Consider the following distribution table for the number of hours of sleep a typical subject experienced in a sleep experiment.

hours of sleep	class interval	number of subjects	proportion per 1 unit	percent (%)
6	5.5 to 6.5	5	0.25	25%
7	6.5 to 7.5	10	0.50	50%
8	7.5 to 8.5	4	0.20	20%
9	8.5 to 9.5	1	0.05	5%

The mean amount of sleep was 7.05 hours.

(a) [2] Fill in the blanks

mean = 7.05 midrange = _____ third quartile = _____
 median = _____ standard deviation = _____ range = _____
 mode = _____ first quartile = _____

(b) [1] The 32nd percentile in hours of sleep is (circle one) **6** / **6.5** / **7** / **7.5** / **8**.

(c) [1] This data set is (circle one) **skewed right** / **skewed left**.

(d) [1] The number of subjects that slept within two standard deviations of the average amount of sleep: (circle one) **15** / **16** / **17** / **18** / **19**.

(a) [2]

7.05, 7.5, 7.5,
7, 0.826, 3
7, 6.5,

(b) [1] **7** ($0.32(21) = 6.72$ position of twenty, or 7)

(c) [1] **skewed right**

(d) [1] **19** (since $7.05 - 2(0.826) = 5.4$ and $7.05 + 2(0.826) = 8.7$ and this includes everyone except the person who slept 9 hours)