
Elementary Statistics – Practice Test – Chapter 2

For questions #1 through #11, please refer to the sample data below. The following are GPA's of randomly selected students. The values are sorted from low to high. { 1.54, 1.59, 1.67, 1.86, 1.94, 2.06, 2.08, 2.43, 2.53, 2.63, 2.91, 2.93, 3.05, 3.12, 3.32, 3.54, 3.80, 3.81, 4.00 }.

1. Compute the sample mean (no need to show work).
 2. Compute the standard deviation and variance (don't show work).
 3. Compute the sample skewness and kurtosis. Use these to judge whether the sample might come from a normal population.
 4. Compute the z-score of 1.67. Would this score be unusually low?
 5. Compute the percentile of 1.67.
 6. Compute the median.
 7. Compute the mode.
 8. Compute the midrange.
 9. Compute the range.
 10. Compute the lower and upper quartiles, and the inter-quartile range.
 11. Construct a frequency table and histogram, with the first lower class limit equal to 1.54. Use 5 classes.
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12. Use the frequency table below to estimate the sample mean and standard deviation of the data that the table represents.

Class	Frequency
10 – 19	1
20 – 29	9
30 – 39	14
40 – 49	12
50 – 59	6
60 – 69	3