HW #69: SHOW ALL WORK on a separate piece of paper
Answer Section

1. mean = $46
   median = $30
   mode = $20
   range = $80

[redacted]

5. a. $5.15; $4.96
   b. $2.28; ≈ $0.81
   c. $5.67; $5.46; $2.51; $0.89
6. a) 13.5%
   b) 16%
   c) 83.85%

[redacted]

8. ±3.3%; between 49.7% and 56.3%
9. about 278 students
10. mean = 35, standard deviation = 3
11. a. $72 \le x \le 92$
    b. about 81.5%
12. Sample answer: A normal distribution is modeled by a bell-shaped curve called a normal curve. The mean and median of the data are equal and both are on the line of symmetry of the curve. The 68-95-99.7 rule for a normal distribution indicates that 68% of the data are within one standard deviation of the mean, 95% of the data are within two standard deviations, and 99.7% of the data are within three standard deviations.

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15. convenience
16. Sample answer: Convenience; the population is all students who attend the school; the sample is not biased, because the surveyor has no control over who arrives at school first.
17. Answers may vary. Sample answer: Make a list of all 141 juniors. Assign each junior a different integer from 1 to 141. Generate 20 unique random integers. Poll the 20 students that correspond to the 20 integers you generated.