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

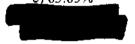
1. mean = \$46

median = \$30

mode = \$20



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



- 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.



- 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.