

STT 200 9-16-09 NAME _____
Hand this in Tuesday 9-22-09.

SECTION _____

1. Mean _____ * _____ * _____ *

2. Median _____ * _____ * _____ *

3. Median for list {2, 6, 7}.

4. **Probability** histogram for the heights of 500 men (inches). Suppose there are 79 men having height in the interval (70, 73]. Give the height of the probability histogram for that interval.

5. Standard deviation s for list {2, 6, 7}.

6. _____ *** _____ * * * _____ * _____ *

Give the first quartile.

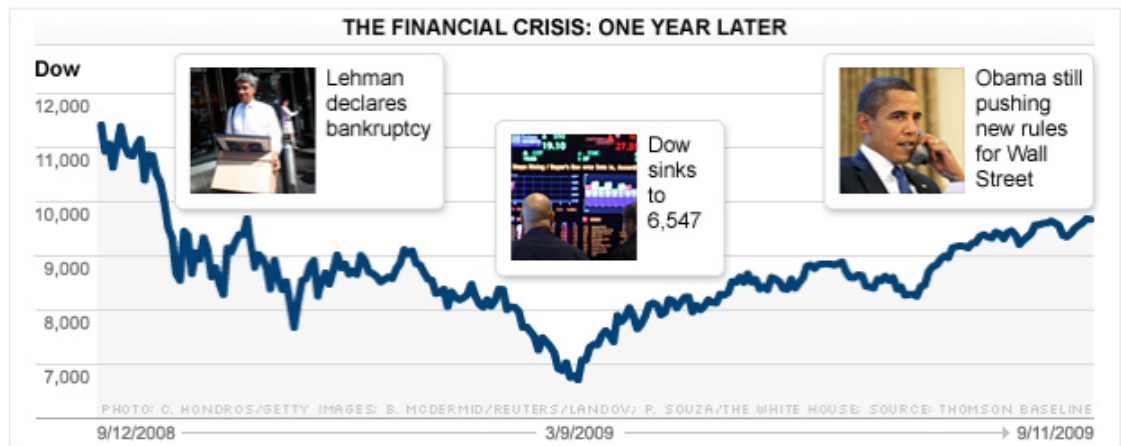
7. ___ * _____ *** _____ * * * _____ * _____ *

Give the third quartile.

8. ___ * _____ *** _____ * * * _____ * _____ *

Give the inter-quartile range.

9. A list x has mean 4.6. Give the mean of the list $2x$ (all scores doubled).
10. A list y has mean 3.8. Give the mean of the list $2y + 3$.
11. A list z has $s = 2.2$. Give s for the list $2z$.
12. A list w has $s = 5.7$. Give s for the list $w+19$.
13. What principle from chapter 3 is routinely violated by graphs such as this?



14. What is the underlying reason behind Simpson's Paradox in the Berkeley graduate admissions data mentioned in your book? Go on-line if you cannot get it from the book.
15. Consult chapter 6 to answer this question. Suppose that honeybee hives produce an average of 3.2 gallons with a standard deviation of 0.9 gallons. Assuming that these production figures follow a normal (bell) distribution, sketch the distribution. Be sure to label the mean 3.2 and $s = 0.9$ as recognizable elements of your sketch. I plan to go over this topic Monday.
16. From your sketch (15), determine the percentage of hives producing between the limits 3.2 ± 0.9 gallons.