

Box and Whisker Worksheet

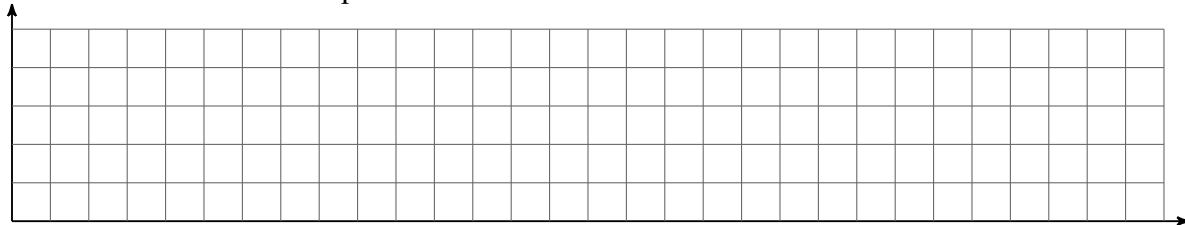
Use the data below to answer questions #1-4.

- 1) Shoe Size
- | | | | | | | |
|-----|-----|-----|-----|---|-----|---|
| 5 | 5 | 5.5 | 6.5 | 8 | 8.5 | 9 |
| 9.5 | 9.5 | 10 | 10 | | | |

2) State the mean, median, mode, and range.

3) Find the 5 number summary.

4) Create a box and whisker plot.



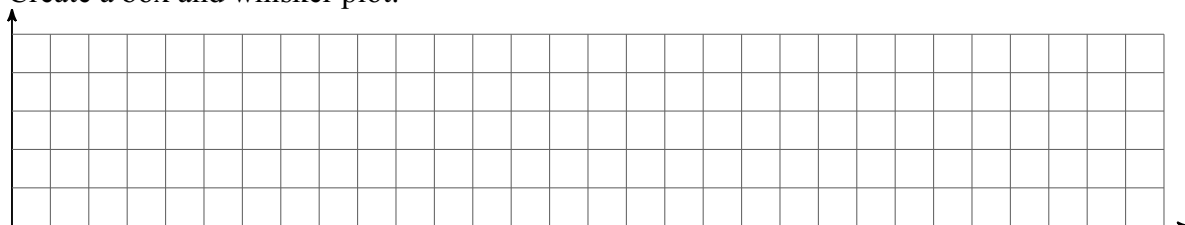
Use the data below to answer questions #5-8

- 5) Goals in a Hockey Game
- | | | | | | | | |
|---|---|---|---|---|---|---|---|
| 6 | 2 | 5 | 5 | 6 | 1 | 5 | 8 |
| 9 | 1 | 4 | 8 | 2 | 6 | 5 | 3 |

6) State the mean, median, mode, and range.

7) Find the 5 number summary.

8) Create a box and whisker plot.

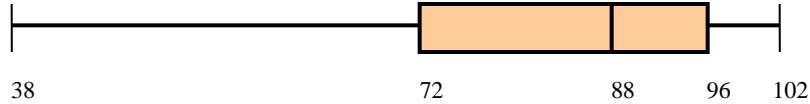


Name _____ Period _____

Box & Whisker Worksheet

For questions 1 – 6, refer to the box & whisker graph below which shows the test results of a math class.

Test Scores (as %) for 6th Period

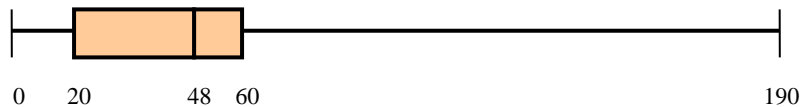


- _____ 1. What was the high score on the test?
- _____ 2. What percent of the class scored above a 72?
- _____ 3. What was the median score on the test?
- _____ 4. What percent of the class scored between 88 & 96?
5. Do you think that this test was too hard for the students? Explain.

6. Would you expect the mean to be above or below the median? Explain.

For questions 7 – 11 refer to the box & whisker graph below that shows how much time was spent per night on homework for sophomore class at a certain high school during September.

Average Minutes Per Night Spent On Homework

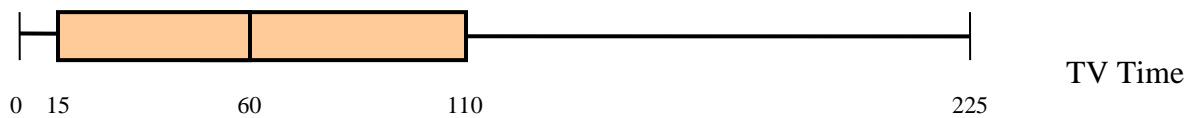
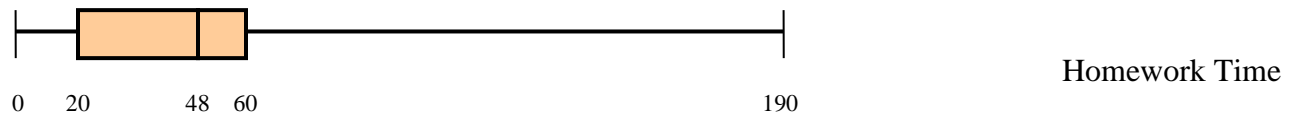


- _____ 7. What percent of the sophomores spend more than 60 minutes on homework per night?
- _____ 8. What is the range of times that the middle 50% of the sophomores spend on homework per night?
- _____ 9. How many sophomores do not do homework?

- _____ 10. What percent of the sophomores spend less than 20 minutes per night on homework?
11. Would you expect the mean number of minutes per night to be higher or lower than the median? Explain.

For questions 12 – 23, refer to the box & whisker graphs below that compare homework time per night with TV time per night for the same group of sophomores.

TV & Homework Minutes per Night



- _____ 12. What percent of the sophomores watch TV for at least 15 minutes per night?
- _____ 13. What is the 3rd quartile for the TV time data?
14. Is it more common for a sophomore at this high school to spend more than 1 hour on homework or more than 1 hour watching TV? Explain.

For questions 15 – 23, identify if each statement is true, false, or cannot be determined.

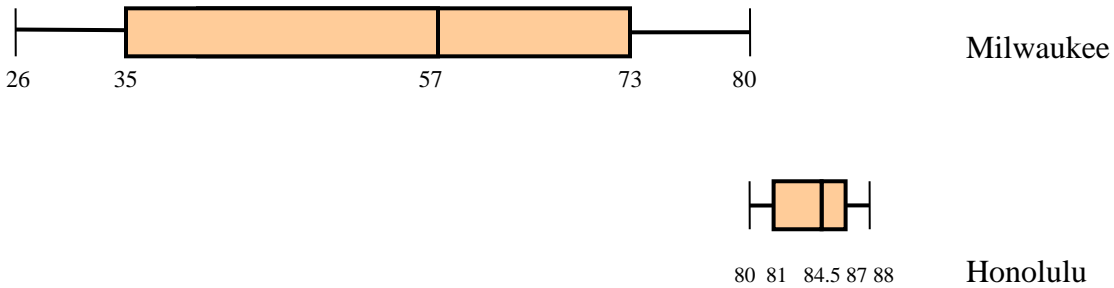
- _____ 15. Some sophomores didn't watch TV that month.
- _____ 16. The TV box & whisker graph contains more data than the homework graph.
- _____ 17. 25% of the sophomores spend between 48 & 60 minutes per night on homework.
- _____ 18. 15% of the sophomores didn't watch TV that month.

- _____ 19. In general, these sophomores spend more time watching TV than doing homework.
- _____ 20. The TV data is more varied than the homework data.
- _____ 21. The ratio of sophomores who spend more than 110 minutes per night watching TV to those who spend less is about 2:1.
- _____ 22. 225 sophomores watch TV.
- _____ 23. Twice as many sophomores watch TV for more than 1 hour than do homework for more than 1 hour.
24. Suppose that one family kept track of how many DVDs they rented each month for a two year period. The numbers for each month are shown in the table below. Make a box & whisker graph from this data.

J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D
3	5	2	8	1	5	0	3	6	4	9	15	3	6	4	1	10	3	8	7	2	9	0	11

For question 25, refer to the box & whisker graphs below that show the average monthly high temperatures for Milwaukee, Wisconsin & Honolulu, Hawaii.

Average Monthly High Temperatures



25. Write a short paragraph comparing the temperatures in both cities.
