

Video Game World

Name _____

Statistics and Box & Whisker Plots



Nintendo, a video game company, has become one of the most influential in the industry and is Japan's third most valuable listed company. As of the fall of 2008, Nintendo has sold over 470 million hardware units and 2.7 billion software units.

The name "Nintendo" means "Leave luck to Heaven".

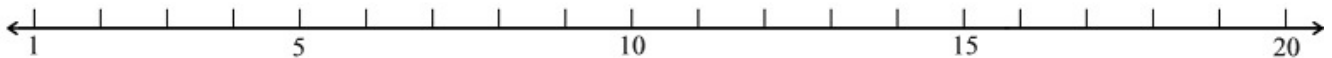
Refer to the charts showing the best-selling games for Super Nintendo and Wii.

1. How is the term "best-selling" being defined in this exercise?

For Super Nintendo Games: (round answers to the *nearest hundredth* if needed)

2. Identify the mean for the data. _____
3. Identify the mode for the data _____
4. Identify the range for the date _____
5. Identify the median for the data _____
6. Identify the minimum (smallest value) _____
7. Identify the maximum (largest value) _____
8. Identify the first quartile _____
9. Identify the third quartile _____
10. Identify the interquartile range _____
11. Using the number line below, construct a box & whisker plot for this data.

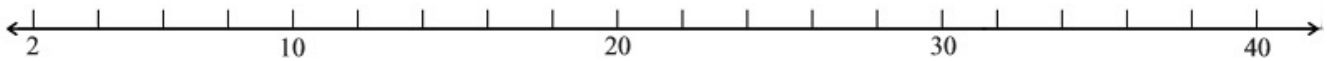
(Place data points above the number line for the minimum, the first quartile, the median, the third quartile and the maximum. Draw a box from the first quartile to the third quartile. Draw a vertical segment through the median. Draw whiskers from the quartiles to the maximum and minimum points. Title the plot.)



12. If data is symmetrical, the mean and the median are equal. If the data is skewed to the right (long whisker on the right), the mean is greater than the median. If the data is skewed to the left (long whisker on the left), the mean is less than the median. The mean is always pulled toward the direction of the skew while the median is not affected. For this set of data, is the data symmetrical, skewed right, or skewed left? _____

For Wii Games: (round answers to the *nearest hundredth* if needed)

- 13. Identify the mean for the data. _____
- 14. Identify the mode for the data _____
- 15. Identify the range for the data _____
- 16. Identify the median for the data _____
- 17. Identify the minimum (smallest value) _____
- 18. Identify the maximum (largest value) _____
- 19. Identify the first quartile _____
- 20. Identify the third quartile _____
- 21. Identify the interquartile range _____
- 22. Using the number line below, construct a box & whisker plot for this data.



23. For this set of data, is the data symmetrical, skewed right, or skewed left? _____

Conclusion:

24. What does a box & whisker plot tell you about data that a single number such as the range cannot?