Box-and-Whisker Plots

A box-and-whisker plot is a graph that summarizes a data set along a number line. The **Five Number Summary** will help us construct the box-and-whisker plot.

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16

14

12

8

10

6

4

2

Let’s practice identifying the five number summary before we start plotting!

A: 1, 3, 5, 7, 7, 9, 10, 12, 17

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B: 2, 12, 22, 31, 45, 51, 55, 59, 63, 74

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Examples:

1. Terri waitressed 10 days out of the last two weeks. The amount of money she earned each day in tips are listed below. Create a box-whisker-plot.

$32, $58, $17, $27, $69, $73, $42, $38, $24, $52

2. The following data consists of the weights, in pounds of 24 high school students. Construct a box-and-whisker with the data.

195, 206, 100, 98, 150, 210, 195, 106, 195, 108, 180, 212, 104, 195, 100, 216, 99, 206, 116, 142, 100, 135, 98, 160

The **I**nter-**Q**uartile **R**ange (IQR) is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Practice: Box-and-Whisker Plots Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

The accompanying box-and-whisker plot represents the scores earned on a science test.



1. What it the median score? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

2. What score represents the 25th percentile? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

3. Between which two numbers does half the data lie?

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| (a) 55 and 70 | (b) 55 and 100 | (c) 70 and 85 | (d) 70 and 100 |

4. If Jennifer scored an 85, explain how her grade compares to the rest of the class.

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B. The Jackson family kept track of how many DVD’s they rented each month for a two year period. The numbers for each month are listed below. Make a box-and-whisker plot for this data.

2, 5, 2, 8, 1, 5, 0, 3, 6, 4, 9, 15, 3, 6, 5, 1, 10, 3, 8, 7, 2, 9, 0, 11

5. What is the Inter-Quartile Range for the data? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_