**GSE Algebra 1 Day 06 - Dot Plots and Frequency Tables** **Notes**

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| **Part 1: Dot Plots*** A **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is a graphical display of data using dots! Put a dot for \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 data point above the number. **Example 1:** A random sample of teenagers ages 13 and 14 were asked: On average, how many text messages do you send per day? Here at the results.0, 10, 10, 10, 10, 20, 20, 20, 30, 50, 50, 50, 90, 1001. Display the data in a dot plot.
2. How many teenagers were surveyed? How do you know?
3. Describe the shape of the graph.
4. Count the number of dots at 0 and at 10. What do those numbers mean?

d) What is one conclusion you can draw from this dot plot? **Dot plots are best for SMALL data sets. Each dot represents one piece of data in the set.** |
| **Practice Problems:**  |
| 1. **Ms. Makita made a dot plot to show the scores her students got on a test. At the right is Ms. Makita’s dot plot.**

a) What does each “circle” represent?b) How many students scored at least a 60 but less than an 80?c) How many students scored over an 85? d) What is the mode?  |
| **2. The following dot plot represents scores on a math project in Mr. Jone’s Geometry class.** 1. How many students turned in math projects?
2. Determine the mean and the median of the data set.
3. Determine the mode of the data.
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| 1. **The following data shows the number of medals won per country during the 2006 Winter Olympics.**

1. Make a dot plot for the data

http://www.myweblets.com/myweblets/kids/Math/images/cache/NL-2-0-20-1-0-.jpg1. Describe the shape of the graph

What can you conclude from the dot plot? |
| 1. **Nathan asked his classmates to estimate the number of hours they spend doing homework each week. The following data shows the results of his survey.**

**9, 4, 8, 2, 7, 3, 5, 6, 1, 4, 7, 6, 8, 5, 6, 5, 6, 7, 11, 14, 6**a) Make a dot plot for the data set. **http://www.myweblets.com/myweblets/kids/Math/images/cache/NL-2-0-20-1-0-.jpg**b) Determine mean, median, mode, and range for the data. c) Describe the shape of the graph. d) Does there appear to be any gaps/outliers? |

**Part 2: 1-Way Frequency Tables**

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ refers to a table of the data which only examines one categorical variable at a time.

A **Frequency Table** is a table that lists items and uses tally marks to record and show the number of times they occur.

**Example 1** The following frequency table shows the number of grade 2 students who chose Taco or Burger as their favorite food.



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| 1. Mr. Smith made a frequency table of the scores his students got on a test.

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| Score | Freq | Cumulative Frequency |
| Below 75 | 4 | 4 |
| 76-80 | 14 | 18 |
| 81-85 | 3 | 21 |
| 86-90 | 8 |  |
| 91-95 | 5 |  |
| 96-100 | 1 |  |

1. How many students scored more than 85%?
2. Do you know how many students scored a 94?
3. Complete the cumulative frequency column.
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| 1. Display each set of data in a frequency table.
2. 5 1 4 6 2 6 4 5 1 3 2 6 4 5 4 6 b) 4 3 1 2 1 3 3 1 3 2 1

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| 1. **Construct a frequency table from the box plot below.**

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