Data practice questions:

1. What are some good kinds of graphs for category data?

2. What are some good kinds of graphs for numerical/measurement data?

3. Draw a line plot for this data (pencil lengths in inches):

4, 4, 4, 4, 4 1/2, 5, 5, 5, 5, 5 1/2, 5 1/2, 5 1/2, 6, 6, 6, 7, 7, 7

4. Draw a scaled picture graph to show this data (where the scale is not a unit scale).

Favorite fruit:

Banana: 5

Grapes: 8

Apple: 3

Orange: 4

5. Find the minimum, lower quartile, median, upper quartile and maximum for each of these data sets, and make box plots on a common number line to compare the data:

|  |  |
| --- | --- |
| #candies in 1 oz bag brand A | #candies in 1 oz bag brand B |
| 18 | 20 |
| 19 | 24 |
| 24 | 26 |
| 20 | 21 |
| 17 | 20 |
| 21 | 16 |
| 20 | 18 |
| 19 | 16 |
| 22 | 22 |
| 20 | 23 |
| 22 | 22 |
| 21 | 25 |
| 18 | 19 |
| 20 | 17 |
| 22 | 20 |
| 21 | 25 |

6. Make a histogram with interval size 5 showing the data:

|  |
| --- |
| height in cm. |
| 164 |
| 181.5 |
| 169 |
| 178 |
| 179 |
| 165.5 |
| 160 |
| 183 |
| 187 |
| 158 |
| 165 |
| 181 |
| 172 |
| 180 |
| 166 |
| 176 |

7. Find the mean and mean absolute deviation for the data in problem 6.

8. Which measure of variation is recommended for comparing two data sets that are symmetrically distributed?

9, Which measure of variation is recommended for comparing two data sets that are asymmetrically distributed?

10. The data for this graph was collected from 80 people. What is the median?

What is the upper quartile?

About how many people scored above 70%?

How many scored above 83%?

11.  This is a pair of boxplots of the labor force participation rate of women in 19 U.S. cities in the years 1968 and 1972. Compare the amount and deviation of labor force participation between the two years.

