Name: Key

4 8 4 3 5 6 5 4 5 3 4 3 3 4

Use the list of numbers above to find:

1. The Mean = 4.357 (round to 3 places)
2. The Median = 4
3. The Mode = 5
4. The Range = 5

5. If your data set has 220 things in it, explain how you would find the median and which number(s) would be used for the median.

(1) arrange the items from smallest to largest

(2) The median will be halfway between item number 110 & 111.

#1-3 Circle the appropriate answer

1. Which graph displays how the entire data set can be visually separated and shown?

Bar Graph OR (Pie Graph)

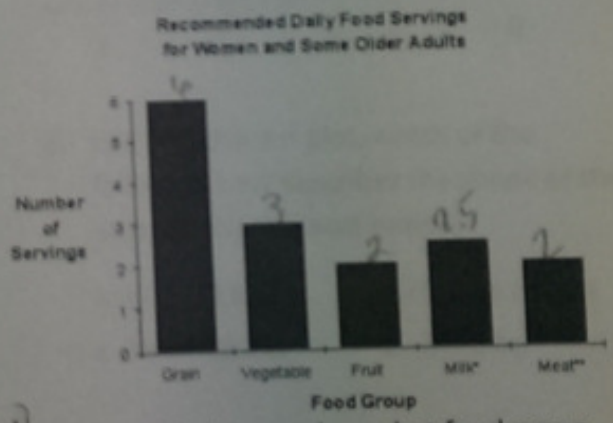
2. Which graph best displays the frequency of categorical data?

(Bar Graph) OR Pie Graph

3. Which graph should you use for the following data:

35% Red
86% Blue
55% Purple
23% Black

(Bar Graph) OR Pie Graph



4. Use the bar graph ... what food group requires the most servings?

Grain

5. How many total servings are represented i the data shown in the bar graph?

15.5 servings

5.2b Checkpoint Quiz

Name: Key

#1-3 Circle the appropriate answer

6. Which 2 of the following graphs best display categorical data?

   (Bar Graph) (Pie Graph) Time Plot

7. Which 1 of the following graphs best shows the past trend for the data being studied?

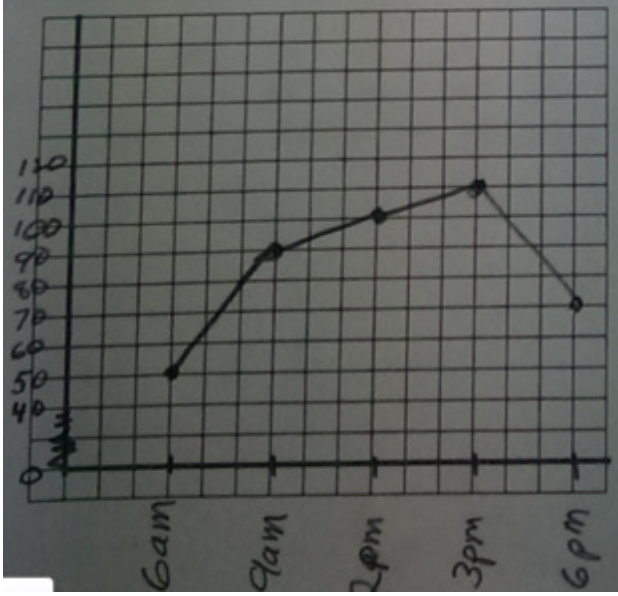
   Bar Graph Pie Graph (Time Plot)

8. Which 1 of the following graphs would best be used to display Mr. Henderson's GPA as he went through middle school, high school, and college?

   Bar Graph Pie Graph (Time Plot)

9. Use the data table and the graph below to create an accurate time plot.

Time of day	6am	9am	12pm	3pm	6pm
Heart Rate	50	90	100	110	70



Probability & Statistics Flipped

5.3 Checkpoint Quiz

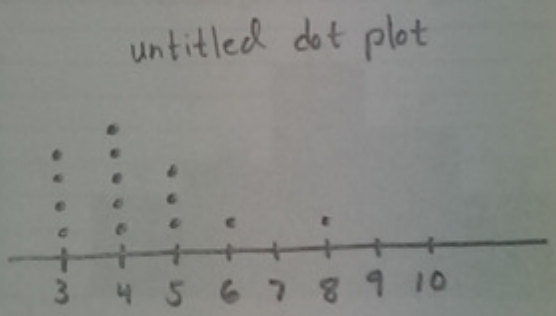
Use the following data set to solve each question:

4	8	4	3	5	6	5
4	5	3	4	3	3	4

1. Find the mean for this data.

   4.357

2. Create a dot plot for the data:



3. Examine the dot plot, which of the following best describes the shape of the data? (circle the best option)

   a. Skewed Left (b. Skewed Right)

   c. Symmetrical d. Bimodal

4. What is the mode for this data?

   4

5. What is the range for this data?

   5

Probability & Statistics
5.3b Checkpoint Quiz

Name: Key

Use the following stemplot that represents some student scores on our chapter 4 exam:

Stem	Leaves
4	5
5	5
6	1 6 8
7	0 5 7
8	2 2 4 6 9 9
9	1 3 5 5 5 8 8 8 8
10	0

1. Find the mean test score (round to 2 places).

$\bar{x} = 82.92$

2. Find the mode test score. 98

3. Find the median test score. 86

The following numbers represent how many minutes it has taken Mr. Henderson to beat Mr. Johnson in various chess matches. Create an organized and correct stemplot for this data:

22 19 34 13 21 20 21
33 72 39 35 35 18 35

minutes taken for Henderson to win.

1	3 8 9
2	0 1 1 2
3	3 5 5 5
4	4
5	
6	
7	2

Probability & Statistics Flipped
5.4 Checkpoint Quiz

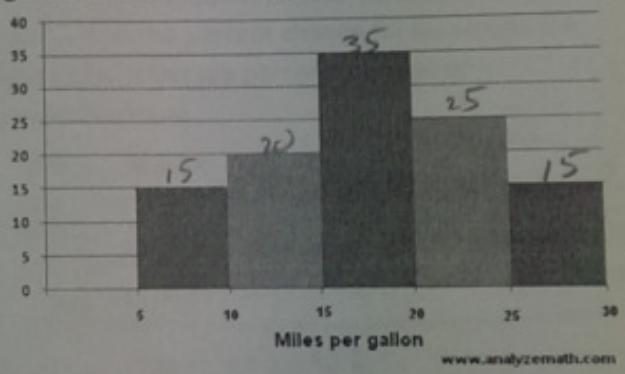
1. Which would be most appropriate to represent the cost of gas over the past 3 years?

Boxplot Histogram (Line Graph) Pie Chart

2. Which of the following uses bins (sometimes called classes) to represent data?

Bar Graph (Histogram) Line Graph Boxplot

Use the Histogram comparing how many miles per gallon different vehicles got on a tank of gas ...



3. One of the lighter colored bins contains 25 vehicles. Which vehicles are in this bin: explain.

vehicles that get 20 or more miles per gallon and less than 25 miles per gallon.

4. How many total vehicles were included in this study? 110

5. How many vehicles are located in what we could call the "mode bin"?

35

Nam

4 8

Use th

1

1. Name the five things that must be included in the 5-number summary.

   1. minimum
   2. Quartile 1
   3. median
   4. Quartile 3
   5. maximum

2. Which of the following graphs should be used to show how the cost of gasoline has changed over the past 10 years?

   Bar Graph Histogram (Line Graph) Boxplot

3. Which of the following types of graphs divides a data set into quarters?

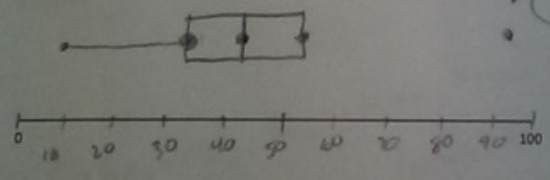
   Bar Graph Histogram Line Graph (Boxplot)

4. Draw a boxplot for the following data:

Min = 9 Q_1 = 34 med = 42 Q_3 = 52 max = 92

9 34 36 42 45 52 92

untitled



outlier see #5 why

*IQR = 52 - 34 = 18

5. Are there any outliers in this data? If so, state the outlier(s) and explain how you know this.

low end cut off = $Q_1 - 1.5(IQR)$
= $34 - 1.5(18)$
= $34 - 27$

low end cutoff = 7

High end cutoff = $Q_3 + 1.5(IQR)$
= $52 + 27$

High end cutoff = 79

Therefore 92 is an outlier

webpage - Windows

1. Find the percent change (be sure to label if this is a percent increase or a percent decrease:

431 becomes 527

This increases by 96.

96 is 22.3% of the original 431.

*Therefore 527 represents a 22.3% increase from 431.

$96 \div 431 = 0.2227$

2. Before Mr. Henderson started his diet and "health learning" experience, he weighed 169 pounds. His diet continued until he weighed 143 pounds. Find the percent change for his weight (be sure to label if this is a percent increase or a percent decrease).

This decreases by 26 pounds.

26 is 15.4% of the original 169.

*Therefore 143 pounds represents a 15.4% decrease from 169 pounds.

$26 \div 169 = 0.1538$

3. Market milk prices are sold by the "hundredweight". In 2009, the price of milk was an average of $11.36. The average price of milk in 2011 was $18.37. Calculate the percent change for milk prices (be sure to label if this is a percent increase or percent decrease).

This is an increase of $7.01.

$7.01 is 61.7% of $11.36

*Therefore $18.37 represents a 61.7% increase in price of milk.

$7.01 \div 11.36 = 0.6170$