

**2015-2016 1st Trimester Math Assessment
Grade 6**

Student Name:

Date:

1. Use the tables to answer the questions.

World's Tallest Buildings, 2014			World's Tallest Buildings, 1980		
Building Name	Country	Height (meters)	Building Name	Country	Height (meters)
Burj Khalifa	United Arab Emirates	828	Sears Tower	United States	442
Shanghai Tower	China	632	1 World Trade Center	United States	417
Makkah Clock Royal Tower	Saudi Arabia	601	2 World Trade Center	United States	415
One World Trade Center	United States	541	Empire State Building	United States	381
CTF Finance Center	China	530	Aon Center	United States	346
Taipei 101	Taiwan	509	John Hancock Center	United States	344
Shanghai World Finance Center	China	493	Chrysler Building	United States	319
International Commerce Center	China	484	First Canadian Place	Canada	298
Petronas Tower 1	Malaysia	452	American Int'l Building	United States	290
Petronas Tower 2	Malaysia	452	The Trump Building	United States	283
Total		5,522	Total		3,535

a. Describe how the two tables are similar and how they are different.

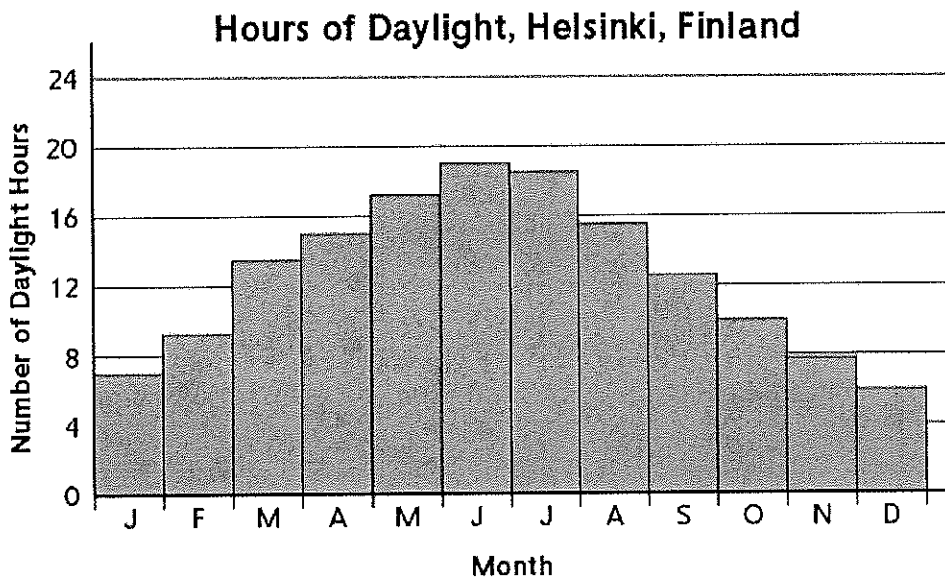
b. Which data landmarks would you use to compare the tables? Why?

c. How would you expect the means of the two tables to compare? Why?

2 a. Construct a data set that fits the following requirements. There are 13 items in the set. The range is 19. The maximum is 45. The mode is 34. The median is 34.

b. Describe what your data set could represent.

3. Use the bar graph to answer the questions.



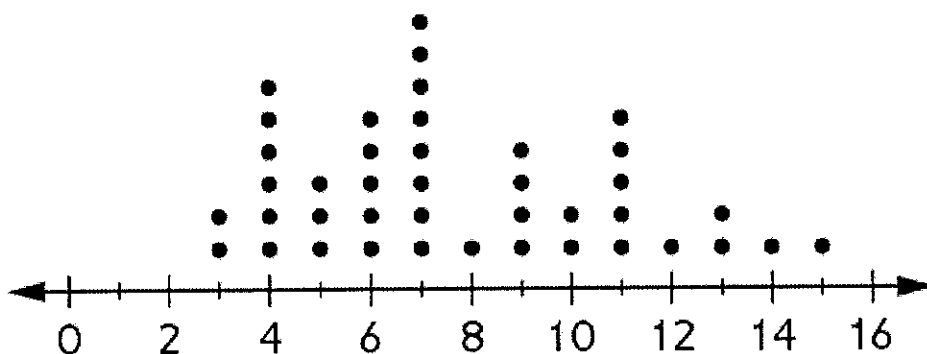
a. What information is displayed in the graph?

b. Estimate the number of daylight hours in November.

c. Describe the shape of the graph.

d. Why do you think the data are distributed the way they are?

Games Won by Chicago Bears, 1970-2010



4. What are two pieces of information you know about the number of games won by the Chicago Bears based on this dot plot?

5a. Write an integer greater than -5. _____ Explain how you know a number is greater than -5.

b. Write a number that is an integer but not a whole number. _____

c. Identify ALL the categories that 12 belongs to.

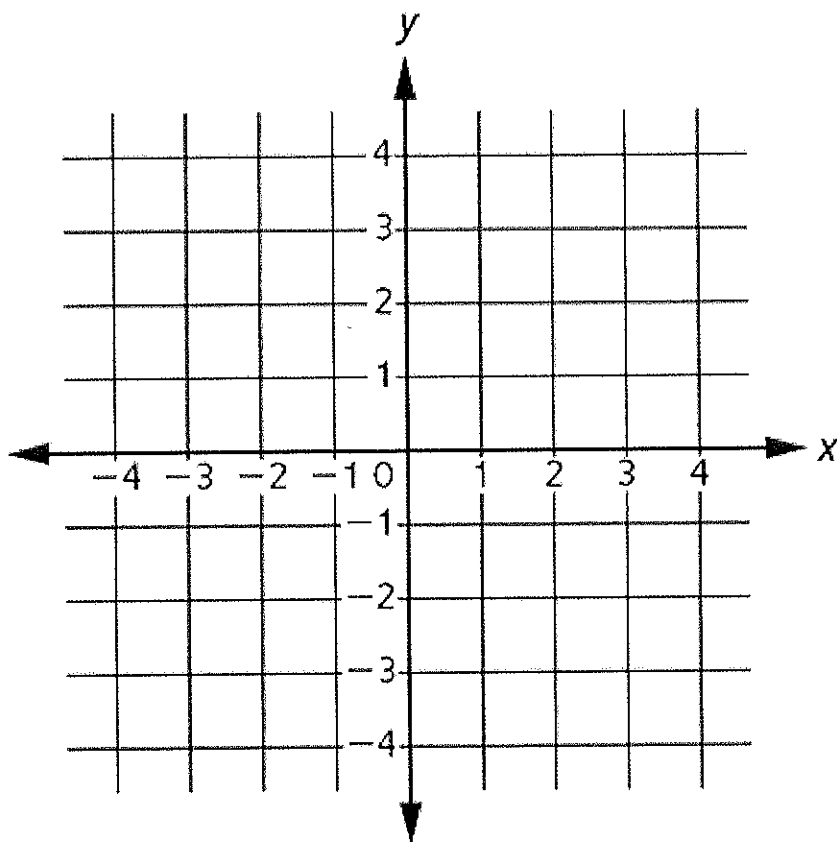
A. counting number

B. rational number

C. integer

D. whole number

6. Graph the points on the coordinate grid.

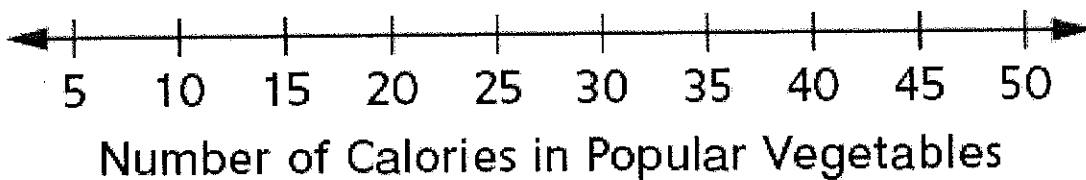


- a. $(-4, -4)$
- b. $(3 \frac{1}{2}, 2 \frac{1}{2})$
- c. $(-2, 1)$
- d. $(1, 0)$
- e. $(-1 \frac{1}{2}, -2)$
- f. $(4, -3 \frac{1}{2})$

7. Below are the numbers of calories in a single serving of some popular vegetables.

20, 25, 40, 30, 25, 15, 10, 20, 25, 10, 10, 15, 25, 40, 10, 20, 25. Source: FDA

a. Make a dot plot of the data.



b. Use your dot plot to find the minimum, maximum, median, and mode.
Estimate the mean.

Minimum: _____

Maximum: _____

Median: _____

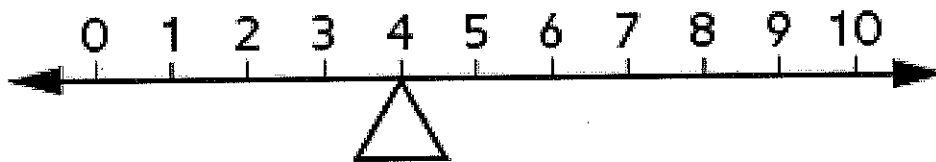
Mode: _____

Estimate of the Mean: about _____

8. Create a dot plot with at least 7 data points.

The maximum is 9.

The balance point for the set of the data needs to be 4, but none of the points can be located at 4.



9. a. 52% of 25 is ___.

b. 126 is 90% of what number?

10. A lamp that regularly sells for \$40 is on sale for 15% off.
Find the sale price.

Sale price: \$__

11. A survey reported favorite movies for fifth graders.
The results of the survey were as follows:

37% Science Fiction 30% Adventure 18% Comedy 15% Other

If 100 students answered the survey, how many of them chose comedy movies?

12. Anoki baked 36 cupcakes for the bake sale. If 75% of them had chocolate frosting, how many cupcakes had chocolate frosting?

13. Estimate. Then solve.

$$248.1 + 96.59$$

Estimate _____

Solution _____

14. a. $2.919 + 19.89 = \underline{\quad}$

b. $86.67 + 316.434 = \underline{\quad}$

c. $64.88 - 25.055 = \underline{\quad}$

d. $4.108 - 0.27 = \underline{\quad}$

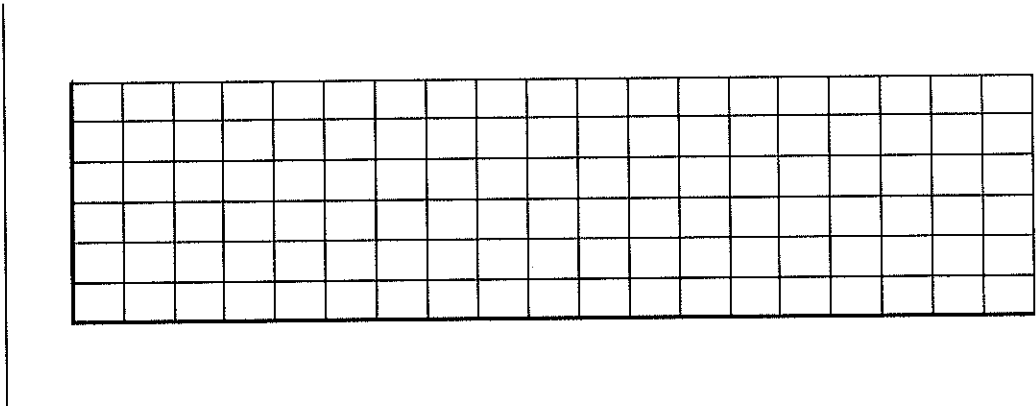
15. Yasmin went to the art store to purchase supplies for a school project. She bought paints for \$28.69, brushes for \$19.85, and watercolor paper for \$18.11. There was no tax. She paid with a \$100 bill. How much change did she receive? Show your work.

\$_____

16. The fifth grade students at Community School measured their heights to the nearest centimeter. Use the data in the table to create a bar graph below. Label the parts of the graph.

Height in cm	Number of Students
137	1
139	3
144	3
147	3
151	1
153	4
158	1
162	1
164	1

_____ (title)



a.

Use the data above to find the following landmarks.

b. Median: _____

c. Mode: _____

d. Mean (Round to the nearest cm): _____

e. What would happen to the median if two students were added to the class data and both measured 151 centimeters?

17. a. What is the mode?

- A) The most frequent value
- B) The smallest value
- C) The middle value
- D) The largest value

b. What is the median?

- A) The middle value
- B) The smallest value
- C) The largest value
- D) The most frequent value