

2015-2016 1st Trimester Math Assessment Answer Key
Grade 6 #141182

Use the tables to answer the questions.

World's Tallest Buildings, 1980

Building Name	Country	Height (meters)
Sears Tower	United States	442
1 World Trade Center	United States	417
2 World Trade Center	United States	415
Empire State Building	United States	381
Aon Center	United States	346
John Hancock Center	United States	344
Chrysler Building	United States	319
First Canadian Place	Canada	298
American Int'l Building	United States	290
The Trump Building	United States	283
Total		3,535

World's Tallest Buildings, 2014

Building Name	Country	Height (meters)
Burj Khalifa	United Arab Emirates	828
Shanghai Tower	China	632
Makkah Clock Royal Tower	Saudi Arabia	601
One World Trade Center	United States	541
CTF Finance Center	China	530
Taipei 101	Taiwan	509
Shanghai World Finance Center	China	493
International Commerce Center	China	484
Petronas Tower 1	Malaysia	452
Petronas Tower 2	Malaysia	452
Total		5,522

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?

①

①

①

①

①

? / 1 points

2

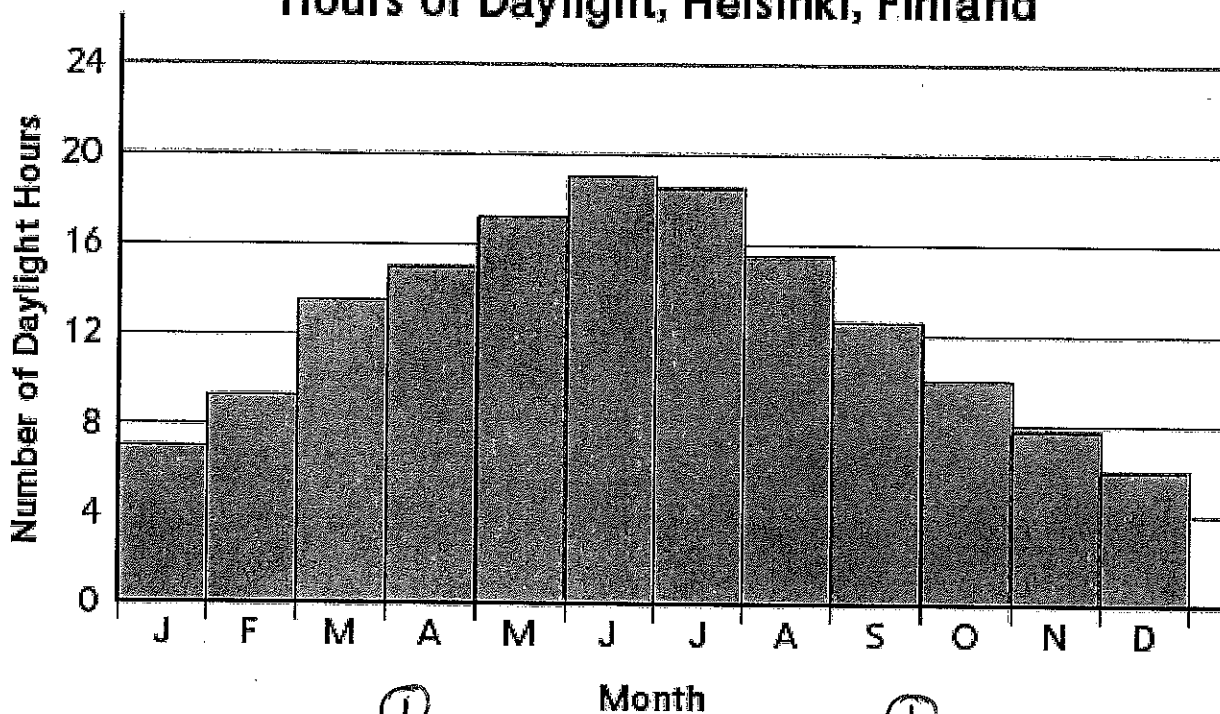
a. Construct a data set that fits the following requirements. There are 13 items in the set. The range is 19. The maximum is 45. The mode is 34. **b.** Describe what your data set could represent.

? / 1 points

3

Use the bar graph to answer the questions.

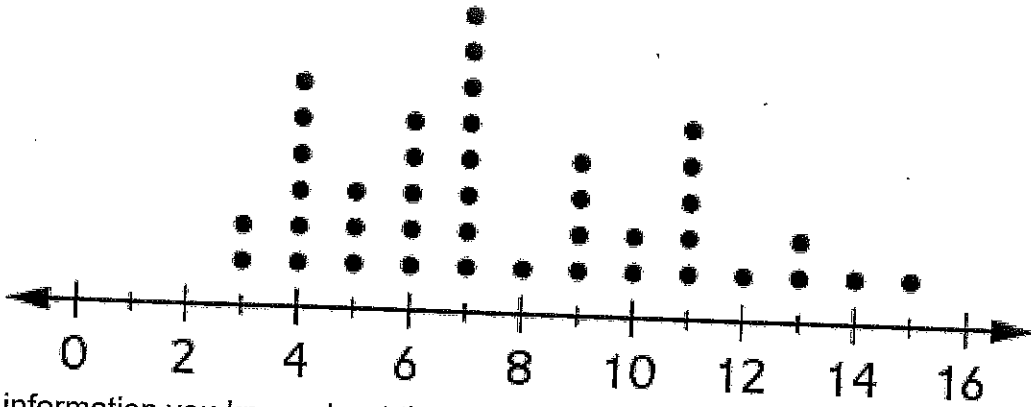
Hours of Daylight, Helsinki, Finland



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?

? / 1 points

Games Won by Chicago Bears, 1970-2010



information you know about the number of games won by the Chicago Bears based on this dot plot?



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

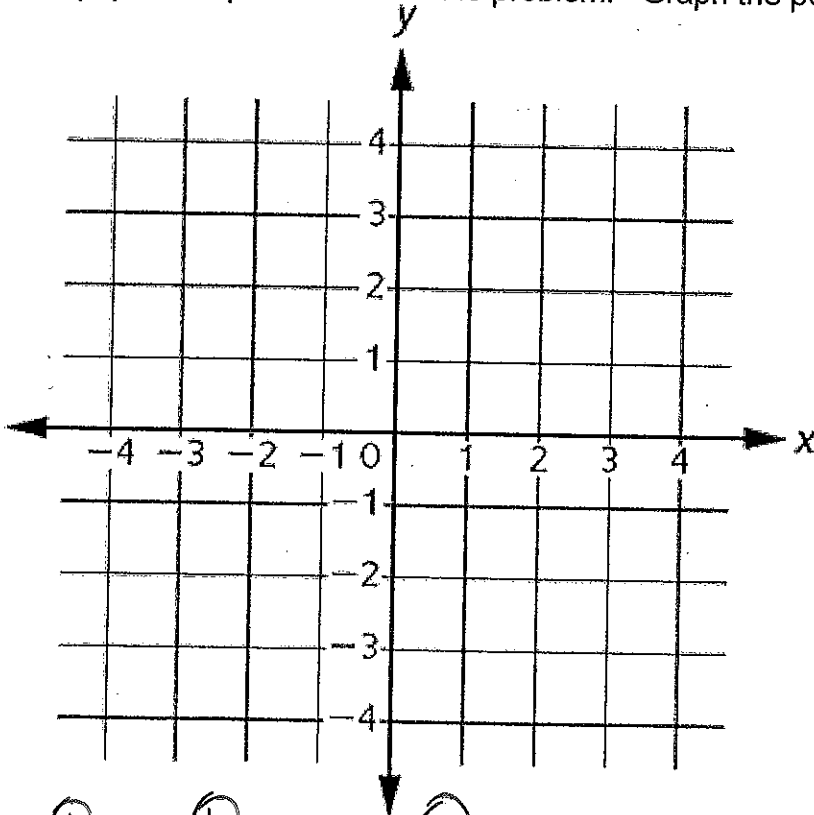
? / 1 points

5

- a. Write an integer greater than -5 . 1 Explain how you know a number is greater than -5 . 1
 b. Write a number that is an integer but not a whole number 1 c. Identify ALL the categories that 12 belongs to. 1
 A. counting number B. rational number C. integer D. whole number

6

Use paper and pencil to solve the problem. Graph the points on the coordinate grid.

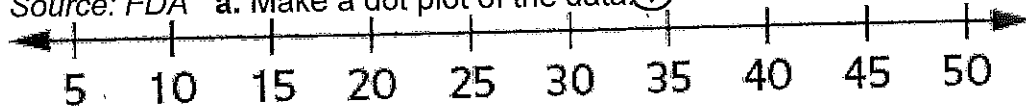


- d. 1 $(1, 0)$ e. 1 $(-1\frac{1}{2}, -2)$ f. 1 $(4, -3\frac{1}{2})$

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

7

Use paper and pencil to solve the problem. 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.



Number of Calories in Popular Vegetables

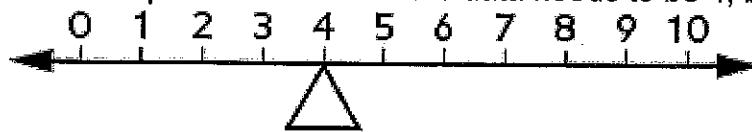
find the minimum, maximum, median, and mode. Estimate the mean.

Maximum: 40 Median: 25 Mode: 10
about 25

b. Use your dot plot to
Minimum: 10
Estimate of the Mean: 25

8

Use paper and pencil to solve the problem. 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.



7

9a. Find 52% of 25. 52% of 25 is 13. (copy)

13
9b. 126 is 90% of what number? 126 is 90% of 140. (copy)

140

10. A lamp that regularly sells for \$40 is on sale for 15% off. Find the sale price. Sale price: \$34 (copy)

34.00
or 34

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? 18 (copy)

18

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

13. Estimate. Then solve. $248.1 + 96.59$ Estimate ① Solution ① (copy)

? / 1 points

14. Solve. Show your work. a. $2.919 + 19.89 =$ ① b. $86.67 + 316.434 =$ ① c. $64.88 - 25.055 =$ ① d. $4.108 - 0.27 =$ ① (copy)

? / 1 points

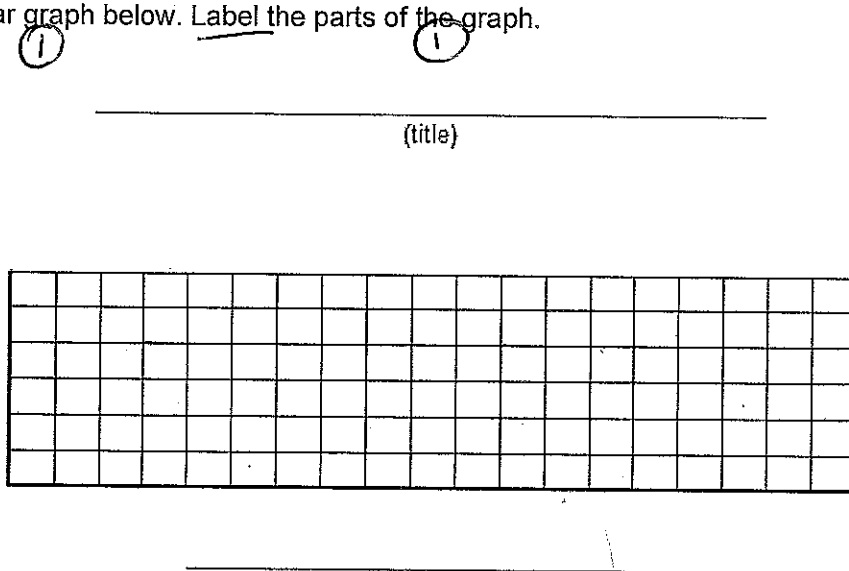
22.809 403.104 39.825 3.838

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. \$ ① (copy)

? / 1 points

16. Use pencil and paper to answer the question. The fifth grade students at Community School measured their heights to the nearest centimeter. Use the data in the table to ① create a bar graph below. ① 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



a.

Use the data above to find the following landmarks.

b. Median: ①

c. Mode: ①

d. Mean (Round to the nearest cm): ①

e. What would happen to the median if two students were added to the class data and both measured 151 centimeters? ① (copy)

17a What is the median?

? / 1 points

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

1

? / 1 points

17b What is the mode?

? / 1 points

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

1