Warm-Ups: Textbook p.536 (4 - 8)

millions	hundred millions	ten millions	millions	hundred thousands	ten thousands	thousands	hundreds	tens	ones	.	tenths	hundredths	thousandths	ten thousandths
	2	3	4	5	6	7	8	.	9	1	2	3		

The number shown is *two million, three hundred forty-five thousand, six hundred seventy-eight and nine thousand one hundred twenty-three ten-thousandths.*

Write each of the following as a number.

4. two million, one hundred fifty thousand, four hundred seventeen
5. five thousand, one hundred twenty and five hundred two thousandths
6. nine million, ninety thousand, nine hundred and ninety-nine ten-thousandths

Use < or > to make each sentence true.

7. 9 ▪ 8 $>$

8. 164 ▪ 246 $<$

(4) 2,150,417

(5) 5120.502

(6) 9,090,900.0099

1-2

Day 2.

Measures of Central Tendency and Range

Goals
- Use the measures of central tendency.
- Find the range of a set of data.

The Mean, or arithmetic average, is the sum of the values divided by the number of items of data.

The Median is the middle value when the data are arranged in numerical order. If the number of items of data is odd, the median is the middle value. If the number of items of data is even, add the two middle values and divide by 2.

2 2 2 3 (3) 4 5 5 7

2 4 (4 5) 6 7 $\quad \frac{4+5}{2} = \frac{9}{2} = (4.5)$

Mode

The is the value that occurs most frequently in the set of data. Some sets of data have no mode. Some have more than one mode.

5,6,7,9,12,15 No mode

5,6,6,6,7,9,9,8 mode: 6

5,5,5,5,7,8,8,8,8,10,12 mode: 5 and 8

Range

The is the difference between the greatest and the least values in a set of data.

ex 12 − 5 = 7

Highest − Lowest

Row work practice. Divide and Conquer. Put on board.

Mean, Median and Mode

Where does one go to learn Spanish?

I. What is the median of boxes of cookies sold? 77

O. What is the mode of Chuck's scores? 73

cookies:

35, 44, 57, 66, 77, 98, 107, 107, 111

Boxes of Cookies Sold	
Amanda	77
Joe	111
Jill	57
Andrew	98
Molly	107
Josh	44
Terry	35
Brad	107
Sarah	66

Chuck's Test Scores	
math	88
Spanish	73
art	84
science	84
history	73
drama	62

Mean, Median and Mode

Where does one go to learn Spanish?

84.75

I. What is the mean of students born each month?

L. What is the mode of cookies sold? 107

Boxes of Cookies Sold	
Amanda	77
Joe	111
Jill	57
Andrew	98
Molly	107
Josh	44
Terry	35
Brad	107
Sarah	66

Birth Months of Students at WJHS	
January	89
February	93
March	51
April	64
May	91
June	103
July	46
August	64
September	82
October	123
November	112
December	99

Mean, Median and Mode

Where does one go to learn Spanish?

R. What is the mean of Chuck's test scores? 79

H. What is the mode of students born each month? 64

Birth Months of Students at WJHS	
January	89
February	93
March	51
April	64
May	91
June	103
July	46
August	64
September	82
October	123
November	112
December	99

Chuck's Test Scores	
math	88
Spanish	73
art	84
science	84
history	73
drama	62

Mean, Median and Mode

Where does one go to learn Spanish?

S. What is the median of Chuck's scores?

G. What is the median of students born each month?

62, 73, 73, 84, 88, 94

$\frac{73+84}{2} = 78.5$

Chuck's Test Scores	
math	88
Spanish	73
art	84
science	84
history	73
drama	62

Birth Months of Students at WJHS	
January	89
February	93
March	51
April	64
May	91
June	103
July	46
August	64
September	82
October	123
November	112
December	99

Mean, Median and Mode

Where does one go to learn Spanish? 90

G. What is the median of students born each month?

N. What is the mean of boxes of cookies sold?

78

Birth Months of Students at WJHS	
January	89
February	93
March	51
April	64
May	91
June	103
July	46
August	64
September	82
October	123
November	112
December	99

Boxes of Cookies Sold	
Amanda	77
Jim	111
Jill	57
Andrew	98
Holly	167
Josh	44
Terry	35
Brad	167
Sarah	44

Which measures of central tendency best represent each data set?

6. number of people with red hair in a sample of 100 people mode
7. target blood pressure for a 16-year-old median
8. favorite color among your classmates mode

19. average mass of an adult polar bear mean
20. most requested song at a radio station mode
21. middle value of nurses' salaries median
22. average height of a female student in your grade mean

45. Calculate the mean and median of five consecutive whole numbers. What conclusion can you draw?

CRITICAL THINKING Does your conclusion from Exercise 45 hold true for six consecutive whole numbers? Explain.

Classwork:
1.2 Extra Practice Wkst