

Name _____

Date _____

How Do We Determine The Mean, Median, and Mode From A Table?

When the range is small, we use intervals of length one to group data. For example, lets examine the table below which represents the number of times last summer that a certain number of students went to Jones Beach. After looking over the table, answer these questions:

- (a) What is the total frequency? _____
- (b) What is the mean? _____
- (c) What is the median? _____
- (d) What is the mode? _____

Interval	Frequency
10	1
9	2
8	3
7	2
6	4
5	3

State a procedure that can be used to determine the mean for a table of grouped data when the length of the interval is one.

1. _____
2. _____
3. _____

Modal Interval - _____

1) The data below is grouped in intervals other than length one.
Find:

- (a) the total frequency _____
- (b) the interval which contains the median _____
- (c) the modal interval _____

Interval	Frequency
55 - 64	3
45 - 54	8
35 - 44	7
25 - 34	6
15 - 24	2

2) From the grouped data find:

- (a) the total frequency _____
- (b) the mode _____
- (c) the median _____
- (d) the mean _____

Grade	Number (Frequency)
60	1
61	1
62	1
63	2
64	3
65	4
66	2
67	1
68	0

3) The prices of seven race cars sold last week are listed in the table below.

Price per Race Car	Number of Race Cars
\$126,000	1
\$140,000	2
\$180,000	1
\$400,000	2
\$819,000	1

What is the mean value of these race cars, in dollars?

What is the median value of these race cars, in dollars?

State which of these measures of central tendency best represents the value of the seven race cars. Justify your answer.

4) Three consecutive even integers can be represented by x , $x + 2$, and $x + 4$. The average of these consecutive even integers is 20. Find the integers.

5) The values of 11 houses on Washington St. are shown in the table below
(a) Find the mean value of these houses in dollars.

Value per House	Number of Houses
\$100,000	1
\$175,000	5
\$200,000	4
\$700,000	1

(b) Find the median value of these houses in dollars.

(c) State which measure of central tendency, the mean or the median, *best* represents the values of these 11 houses. Justify your answer.

6) The heights of the players on the basketball team are shown in the frequency table: Find the mean, median, mode and range.

Height (Inches)	Frequency (# of players)
71	1
72	2
73	3
64	3
75	4
76	0
77	2

7) The scores for a science quiz are shown in the table. What are the median and mode(s) of the scores?

Science Quiz Scores	
Score	Number of Students
30	1
40	2
50	4
60	5
70	8
80	11
90	1
100	2

8) The numbers of season home runs hit by players on a baseball team are shown in the table.

- Find the mean number of runs.
- Find the median number of runs.

Player	Number of Runs
Briggs	11
Velez	17
O'Neil	0
Aziz	9
Gold	5
Williams	14
Sanders	2
Lin	8
Trask	15