Mean is the average of a set of numbers.

Median is the middle value of a range of values or numbers. Also called the "midpoint."

Mode is the value that occurs most often. If no number is repeated, then there is no mode for the list.

Ex 1: Find the mean, median, and mode for the following data set.

13, 18, 13, 14, 13, 16, 14, 21, 13

Step1: Find the mean.

Add up all the numbers and then divide by the number of numbers. Ok to use calculator!!!

13 + 18 + 13 + 14 + 13 + 16 + 14 + 21 + 13 = 135

135 ÷ 9

Mean = 15

Step2: Find the median.

Numbers have to be listed in numerical order.
You must rewrite the list & select center number.

13, 18, 13, 14, 13, 16, 14, 21, 13

Rewrite

13, 13, 13, 13, 14, 14, 16, 18, 21

Middle number is your median.

13, 13, 13, 13, 14, 14, 16, 18, 21

Median = 14

Step3: Find the mode.

Which number repeats the most?

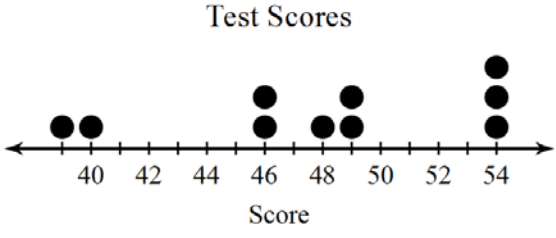
13, 13, 13, 13, 14, 14, 16, 18, 21

13, 13, 13, 13, 14, 14, 16, 18, 21

Mode = 13

ANSWER
Mean = 15
Median = 14
Mode = 13

Ex 2: Find the mode, median, and mean for the following data set.



Step1: Organize Data.

Count the number of dots and align to the numbers below dots.

39, 40, 46, 46, 48, 49, 49, 54, 54, 54

Step2: Find the mode.

Which number repeats the most?

39, 40, 46, 46, 48, 49, 49, 54, 54, 54

Mode = 54

Step3: Find the median.

39, 40, 46, 46, 48, 49, 49, 54, 54, 54

Middle number is your median.

39, 40, 46, 46, 48, 49, 49, 54, 54, 54

If you have no middle number, you must add both middle numbers and divide by 2.

Ok to use calculator!

$(48 + 49) \div 2$

$97 \div 2$

Median = 48.5

Step4: Find the mean.

Add up all the numbers and then divide by the number of numbers. Ok to use calculator!!!

39, 40, 46, 46, 48, 49, 49, 54, 54, 54

$39 + 40 + 46 + 46 + 48 + 49 + 49 + 54 + 54 + 54 = 479$

$479 \div 10$

Mean = 47.9

ANSWER

Mode = 54, Median = 48.5 and Mean = 47.9

Checks for Examples 1 & 2:

Find the mode, median, and mean for each data set.

1) Test Scores

53 38 45 53 42 49 48
53 52

38, 42, 45, 48, 49, 52, 53, 53, 53

38, 42, 45, 48, 49, 52, 53, 53, 53

Mode = 53

38, 42, 45, 48, 49, 52, 53, 53, 53

Median = 49

38 + 42 + 45 + 48 + 49 + 52 + 53 + 53 + 53

433 ÷ 9

Mean = 48.11

2) Age Assumed Office

Senator	Age
Mike Crapo	47
Joe Manchin	63
John Boozman	60
Brian Schatz	40
Jack Reed	47

Senator	Age
Pat Roberts	60
Johnny Isakson	60
Thad Cochran	41
Mike Johanns	58

40, 41, 47, 47, 58, 60, 60, 60, 63

40, 41, 47, 47, 58, 60, 60, 60, 63

Mode = 60

40, 41, 47, 47, 58, 60, 60, 60, 63

Median = 58

40 + 41 + 47 + 47 + 58 + 60 + 60 + 60 + 63

476 ÷ 9

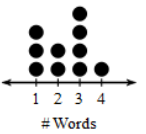
Mean = 52.89

3) Hours Slept

7.75 9.25 8 7.5 6.25 7.5
7 6.5 6

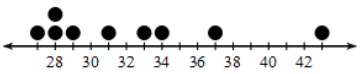
Mode = 7.5, Median = 7.5 and
Mean = 7.31

4) Length of Book Titles



Mode = 3, Median = 2.5 and
Mean = 2.3

5) Time to Run 5km



27, 28, 28, 29, 31, 33, 34, 37, 43

27, 28, 28, 29, 31, 33, 34, 37, 43

Mode = 28

27, 28, 28, 29, 31, 33, 34, 37, 43

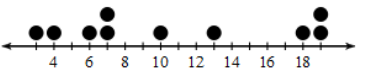
Median = 31

27 + 28 + 28 + 29 + 31 + 33 + 34 + 37 + 43

290 ÷ 9

Mean = 32.22

6) Hits in a Round of Hacky Sack



3, 4, 6, 7, 7, 10, 13, 18, 19, 19

3, 4, 6, 7, 7, 10, 13, 18, 19, 19

Mode = 7 & 19

3, 4, 6, 7, 7, 10, 13, 18, 19, 19

(7 + 10) ÷ 2

17 ÷ 2

Median = 8.5

3 + 4 + 6 + 7 + 7 + 10 + 13 + 18 + 19 + 19

106 ÷ 10

Mean = 10.6