

L3 Discrete Quantitative Data

Discrete quantitative data is numerical data with values that are distinct and specific (often integers)

1. Mode (M_o): the most frequent value in the data.

Ex 1 (Raw data):

22, 24, 24, 25, 26, 26, 26, 31, 32

2. Median (M_d): the middle value in an ordered data.

Case 1: n(number of data entries) is odd:

22, 24, 24, 25, 26, 28, 29, 31, 32

2. Median (M_d): the middle value in an ordered data.

Case 2: n(number of data entries) is even:

22, 24, 24, 25, 28, 29, 31, 32

2. Median (M_d): the middle value in an ordered data.

Ex 3:

Value	Frequency
2	10
4	6
5	2
6	9
9	5
Total	32

Ex 4:

Value	Frequency
20	2
25	8
30	4
40	9
50	6
Total	29

3. Mean (x̄): (average) the sum of the data divided by the number of data entries.

Ex 5: (Raw data) find the mean of

21, 31, 24, 26, 32, 42, 25

n = 7

3. Mean (x̄): (average) the sum of the data divided by the number of data entries.

Ex 6: (Frequency table) find the mean age

Age	Frequency	Total age
12	2	2(12)=24
13	4	4(13)=52
14	3	3(14)=42
Total	9	118

4. Range (R): The difference between the highest and lowest value.

R = X_{max} - X_{min}

Ex 7 – Ruler Reaction Time (cm)

Boys: 6 9 9 9 11 12 14 14 14 14 15 15 17

Girls: 9 9 10 11 11 11 12 13 14 14 15 15 18

Mean

Mode

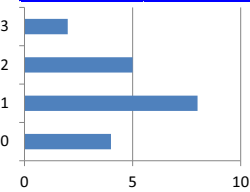
Median

Range

Discrete Quantitative Data

Can be represented by a bar graph or a pie chart

# of pets	frequency	Relative Freq.	Angle	Total
0	4			
1	8			
2	5			
3	2			
Total	19			



Mo:

Md:

x̄:

R:

Practice:
8.3 #1,2

