Mode for Grouped Data

Mode

- the measure or value which occurs most frequently in a set of data
- the value with the greatest frequency

To find the mode of grouped data, use:

$$\text{Mode } (\hat{x}) = lb_{mo} + \left[\frac{d_1}{d_1 + d_2}\right] i$$

where: lb_{mo} = lower boundary of the modal class

d_1 = difference between the frequencies of the modal class and the class preceding the modal class

d_2 = difference between the frequencies of the modal class and the class succeeding the modal class

i = class interval

Practice Exercises

Calculate the mode for each frequency distribution table.

Mid-year Test Scores of Students in Math

Score	Frequency
41 – 45	1
36 – 40	8
31 – 35	8
26 – 30	14
21 – 25	7
16 – 20	2

Compute the following.

1. d_1
2. d_2
3. Mode

Weights of 8–Tesla Students

Weight in kg	Frequency
40 – 44	1
45 – 49	14
50 – 54	15
55 – 59	21
60 – 64	14
65 – 69	10
70 – 74	4
75 – 79	1

Compute the following.

4. d_1
5. d_2
6. Mode

Problem Set

Calculate the mode for each frequency distribution table.

Scores of 10–Tesla Students in the 4^{th} Periodic Test in Mathematics

Score	Frequency
46 – 50	2
41 – 45	9
36 – 40	13
31 – 35	11
26 – 30	10
21 – 25	5

Compute the following.

1. d_1
2. d_2
3. Mode

Number of Mistakes Made by 50 Students in Factoring Quadratic Equations

Number of Mistakes	Frequency
0 – 2	4
3 – 5	8
6 – 8	15
9 – 11	10
12 – 14	6
15 – 17	5
18 – 20	2

Compute the following.

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