

Sheet – 0x: Frequency Table

Question 1: Frequency Table (Categorical Data)

A survey was conducted among 50 students to find out their favorite fruit. The results are as follows:

Apple: 15 students

Banana: 12 students

Orange: 8 students

Grapes: 10 students

Mango: 5 students

Construct a frequency table for the data.

Fruit	Frequency
Apple	15
Banana	12
Orange	8
Grapes	10
Mango	5

Question 2: Proportion (Categorical Data)

Using the frequency table from Question 1, what is the **proportion** of students who chose Banana as their favorite fruit?

Proportion
$\frac{12}{50}$

Question 3: Percentage (Categorical Data)

What percentage of students chose Mango as their favorite fruit?

Frequency
15
12
8
10
5

Question 4: Frequency Table (Numerical Data with Repetition)

The following are the test scores (out of 10) of 20 students:

8, 7, 9, 6, 7, 8, 5, 8, 7, 9, 6, 5, 7, 8, 7, 6, 5, 7, 8, 7

Construct a frequency table for the test scores.

Score	Frequency
5	4
6	3
7	8
8	6
9	2

Question 5: Proportion (Numerical Data with Repetition)

Using the frequency table from Question 4, what is the proportion of students who scored 7?

Proportion
$\frac{8}{20}$

Question 6: Percentage (Numerical Data with Repetition)

What percentage of students scored 8 or above?

Question 7: Frequency Table with Intervals (Continuous Data)

The heights (in cm) of 30 students are recorded as follows:

150, 152, 155, 157, 158, 160, 162, 163, 165, 167, 168, 170, 172, 173, 175, 177, 178, 180, 182, 183, 185, 187, 188, 190, 192, 193, 195, 197, 198, 200

Construct a grouped frequency table using intervals of 150–159, 160–169, 170–179, 180–189, 190–199, 200–209.

Question 8: Proportion (Continuous Data)

Using the grouped frequency table from Question 7, what is the proportion of students whose heights are between 170 cm and 189 cm inclusive?

Question 9: Percentage (Continuous Data)

What percentage of students are taller than 189 cm?

Question 10: Frequency Table (Categorical Data)

A class has students from four different countries:

Country A: 10 students

Country B: 15 students

Country C: 5 students

Country D: 20 students

Construct a frequency table for the data.

Question 11: Proportion (Categorical Data)

Using the frequency table from Question 10, what is the proportion of students from Country D?

Question 12: Percentage (Categorical Data)

What percentage of students are from Country B or Country C?

Question 13: Frequency Table (Numerical Data with Repetition)

The number of books read by each student in a month in a class of 25 students is as follows:

1, 2, 1, 3, 2, 2, 4, 1, 3, 2, 1, 5, 2, 3, 1, 2, 4, 3, 1, 2, 3, 1, 2, 1, 2

Construct a frequency table for the number of books read.

Question 14: Proportion (Numerical Data with Repetition)

What is the proportion of students who read at least 3 books in the month?

Question 15: Percentage (Numerical Data with Repetition)

What percentage of students read fewer than 2 books?