



B.K. BIRLA CENTRE FOR EDUCATION

SARALA BIRLA GROUP OF SCHOOLS
A CBSE DAY-CUM-BOYS' RESIDENTIAL SCHOOL



PRE-MID TERM (2025-26)

MATHEMATICS

Class: VII
Date: 07.08.25


Time: 1 hr.
Max Marks: 25

MARKING SCHEME

Section A

Fill in the blanks:

1 x 5 = 5

1. The value $\frac{1}{2}$ of 24 is 12
2. 7 Rupees 7 paise can be written in rupees as ₹ 7.07
3. 0.041 as a fraction is $\frac{41}{1000}$
4. The mean of the first five natural numbers is 3.
5. The tally mark  shows frequency is 5.

Section B

Do as directed

2 x 4 = 8

6. Which of the following is greater?
(i) 0.5 or 0.05
(ii) 2.03 or 2.30

Solution:

- (i) $0.5 > 0.05$
- (ii) $2.03 < 2.30$

7. Find:

(i) $\frac{2}{5} \div \frac{1}{2}$ (ii) $2\frac{1}{3} \div \frac{3}{5}$

Solution:

(i) $\frac{2}{5} \times \frac{2}{1} = \frac{4}{5}$

(ii) $\frac{7}{3} \times \frac{5}{3} = \frac{35}{9}$

8. Find the mode and median of the data: 11, 16, 12, 15, 19, 12, 15, 13, 15.

Solution:

(i) Mode:

The mode is the value that appears most frequently :15 appears three times.

(ii) Median:

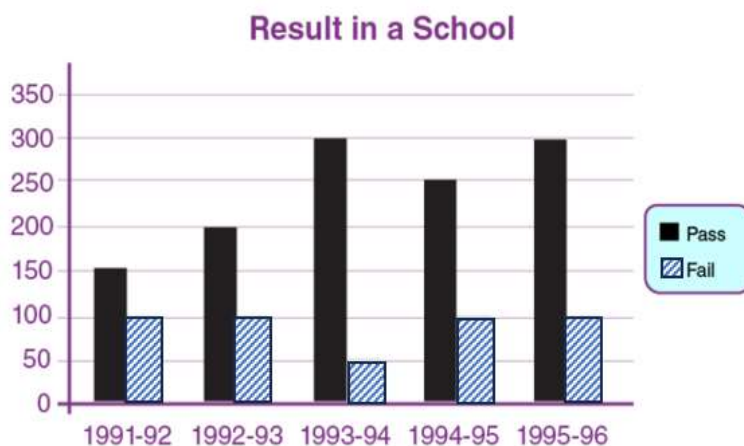
The median is the middle value when the data is arranged in ascending order.

11, 12, 12, 13, 15, 15, 15, 16, 19.

There are 9 values in the data set,

The 5th value is 15.

9. Examine the graph below carefully and answer the following questions. The graph depicts the results of a school's students.



(i) Which year has the smallest difference between the number of kids who passed and those who failed?

(ii) In the last five years, what was the average number of kids who failed in school?

Solution:

(i) The number of pupils who passed versus those who failed for the respective years are given below:

$$1991-1992 = 150 - 100 = 50$$

$$1992-1993 = 200 - 100 = 100$$

$$1993-1994 = 300 - 50 = 250$$

$$1994-1995 = 250 - 100 = 150$$

As a result, the difference in 1991-1992 is minimal.

(ii) From the bar graph, we can observe that.

$$\text{The total number of students failed} = 100 + 100 + 50 + 100 + 100 = 450$$

$$\text{Hence, average} = 450/5 = 90$$

Section C

Solve the following

$$3 \times 4 = 12$$

10. In a class of 40 students $\frac{1}{5}$ of the total number of students who like to study Mathematics, $\frac{2}{5}$ of the total number of students like to study science and the remaining students like to study English.

- (i) How many students like to study English?
- (ii) How many students like to study Mathematics?
- (iii) What fraction of the total number of students like to study Science?

Solution:

Students who like English: $\frac{1}{5}$ of 40 = 8 students

Students who like Mathematics: $\frac{2}{5}$ of 40 = 16 students

Students who like Science: $40 - 8 - 16 = 16$ students

Fraction of students who like Science: $\frac{16}{40} = \frac{2}{5}$

11. A two-wheeler covers a total distance of 55.3 km in one litre of petrol. How much total distance will it cover in 10 litres of petrol?

Solution:

From the above question, it is given that,

Distance covered by the two-wheeler in 1L of petrol = 55.3 km

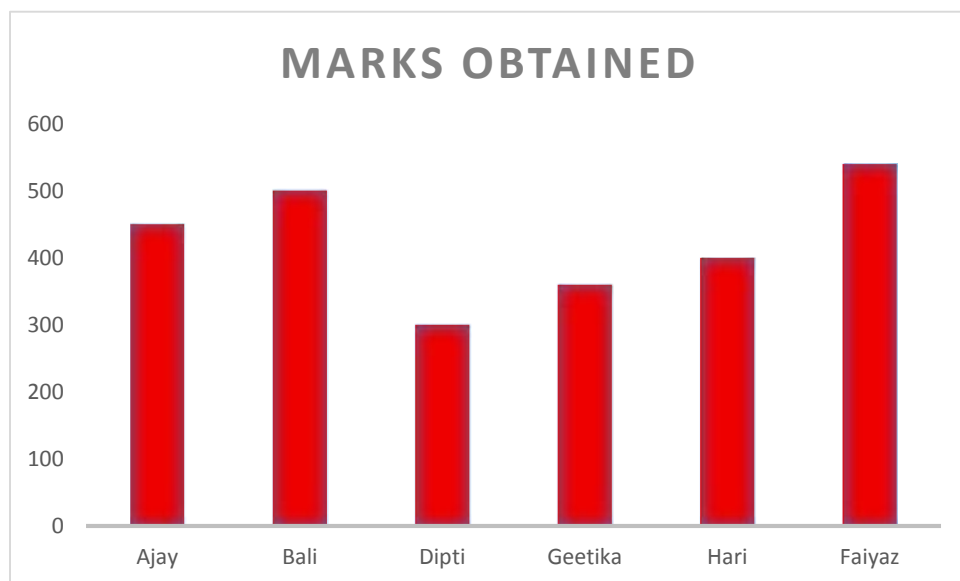
Distance covered by the two-wheeler in 10L of petrol is = (10×55.3)
= 553 km

12. The following data gives the total marks (out of 600) obtained by six children of a particular class. Represent the data on a bar graph.

Students	Ajay	Bali	Dipti	Geetika	Hari	Faiyaz
Marks Obtained	450	500	300	360	400	540

Solution:

1 unit = 100 marks



13. The final marks in Mathematics of 10 students are as follows:
53, 61, 48, 60, 78, 68, 55, 100, 67, 90

(i) What is the range?

(ii) Find the mean

Solution:

The range of the given marks is 52, and the mean is 68.

(i) Range:

The range is the difference between the highest and the lowest values in a dataset.

Highest value: 100

Lowest value: 48

Range: $100 - 48 = 52$

(ii) Mean:

The mean is the average of all the values in the dataset.

Sum of all values: $53 + 61 + 48 + 60 + 78 + 68 + 55 + 100 + 67 + 90 = 680$

Number of values: 10

Mean: $680 / 10 = 68$
