MONTH : NOVEMBER

SESSION : 5

CLASS : V

SUBJECT : MATHEMATICS

CHAPTER NUMBER: 11

CHAPTER NAME : AVERAGE

SUB-TOPIC : EXERCISE 11 A Q. NO.5 TO 8

LEARNING OBJECTIVE :

Enable the students

- To know the use of the word "*Average*"
- Know about the concept of average
- Need of finding average
- Finding average of given data

5. The age , height and weight chart of 5 students is given below.

Name	Age	Height	Weight
Radha	8 y 3 m	121 cm	25.5 kg
Renu	9 y 1m	130 cm	28 kg
Rakhi	8 y 8 m	128 cm	27.8 kg
Rani	10 years	131 cm	30 kg
Ranju	9 y 5 m	130 cm	29 .6 kg

a. Radha's age=   8 x 12 + 3 = 96 + 3 = 99 months

Renu's age=   9 x 12 + 1 = 108 + 1 = 109 months

Rakhi's age=   8 x 12 + 8 = 96 + 8 = 104 months

AVERAGE

Rani's age=   10 x 12 = 120 months

Ranju's age=   9 x 12 + 5 =   108 + 5 = 113 months

The average age = $\dfrac{99 + 109 + 10\ 4 + 120 + 113}{5}$ = $\dfrac{545}{5}$ **= 109 months**

= 9 months 1 month
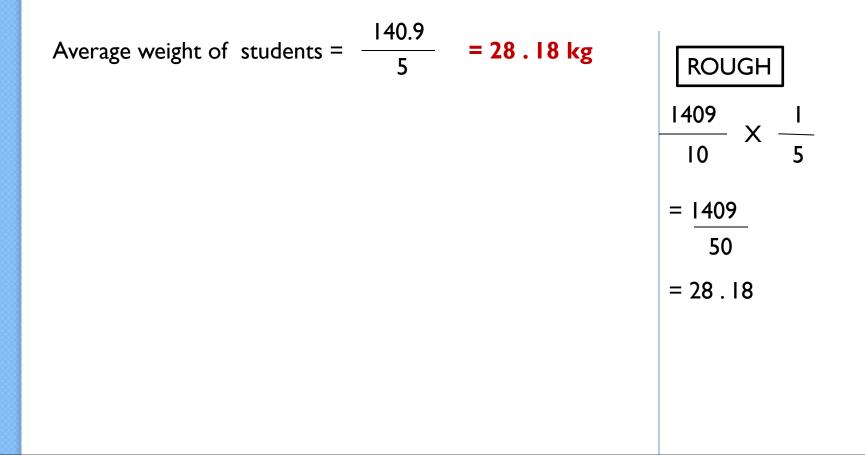
b. Total height of 5 students= 121 + 130 + 128 + 131 + 130 = 640

Average height of 5 students = $\dfrac{640}{5}$ **= 128 cm.**

AVERAGE

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c. Total weight of 5 students = 25.5 + 28 + 27.8 + 30 + 29.6 = 140.9 kg

Average weight of students = $\dfrac{140.9}{5}$ **= 28 . 18 kg**

ROUGH

$$\frac{1409}{10} \times \frac{1}{5}$$

$$= \frac{1409}{50}$$

$$= 28 . 18$$

AVERAGE

EXERCISE 11 A

6. The marks of 20 students of a class in a mathematics test are below

34, 42, 54, 76, 82, 26, 78, 67, 62, 54, 17, 25, 39, 42, 66, 78, 80, 92, 26, 40.

a. The average mark of the class =

$$\frac{34+ 42+ 54+76+82+26+78+67+ 62+ 54+17+25+ 39+42+ 66+ 78+ 80+ 92 + 26+40}{20}$$

$$= \frac{1080}{20} \quad \textbf{= 54}$$

b. 9 students scored marks more than the average marks.

c. 9 students scored marks less than the average marks.

d. 2 students scored marks equal to the average marks.

7. The daily attendance of classes V A, V B, and V C on 5 days of a week are given below

Class	Monday	Tuesday	Wednesday	Thursday	Friday
V A	48	50	52	46	44
V B	49	51	48	45	47
V C	50	47	45	48	50

The average weekly attendance of V A = $\dfrac{48 + 50 + 52 + 46 + 44}{5}$ = $\dfrac{240}{5}$ **= 48**

The average weekly attendance of V B = $\dfrac{49 + 51 + 48 + 45 + 47}{5}$ = $\dfrac{240}{5}$ **= 48**

The average weekly attendance of V C = $\dfrac{50 + 47 + 45 + 48 + 50}{5}$ = $\dfrac{240}{5}$ **= 48**

AVERAGE

a. All the classes have same attendance.

The average attendance of 3 classes on Monday = $\dfrac{48 + 49 + 50}{3}$ = $\dfrac{147}{3}$ = 49

The average attendance of 3 classes on Tuesday = $\dfrac{50 + 51 + 47}{3}$ = $\dfrac{148}{3}$ = 49.33

The average attendance of 3 classes on Wed-day = $\dfrac{52 + 48 + 45}{3}$ = $\dfrac{145}{3}$ = 48.33

The average attendance of 3 classes on Thu-day = $\dfrac{46 + 45 + 48}{3}$ = $\dfrac{139}{3}$ = 46.33

The average attendance of 3 classes on Friday = $\dfrac{44 + 47 + 50}{3}$ = $\dfrac{141}{3}$ = 47

AVERAGE

b. i. On Tuesday the average attendance of all the classes was the best.

ii. On Thursday the average attendance of all the classes was the worst.

8. The marks of 6 students in 6 subject are given below

Name	Eng	Hin	Maths	Sci	Hist	Geo
Amar	63	58	85	68	70	64
Balbir	50	37	41	40	50	46
Chander	82	48	91	88	74	73
Dilraj	60	58	62	60	65	67
Ela	48	51	47	50	51	47
Fatima	75	48	70	66	80	75

A.

The average marks in English = $63 + 50 + 82 + 60 + 48 + 75 = \dfrac{378}{6}$ **= 63**

The average marks in Hindi = $58 + 37 + 48 + 58 + 51 + 48 = \dfrac{300}{6}$ **= 50**

The average marks in Maths = $85 + 41 + 91 + 62 + 47 + 70 = \dfrac{396}{6}$ **= 66**

The average marks in Science = $68 + 40 + 88 + 60 + 50 + 66 = \dfrac{372}{6}$ **= 62**

The average marks in History = $70 + 50 + 74 + 65 + 51 + 80 = \dfrac{390}{6}$ **= 65**

The average marks in Geo = $64 + 46 + 73 + 67 + 47 + 75 = \dfrac{372}{6}$ **= 62**

B.

The average marks of Amar = $63 + 58 + 85 + 68 + 70 + 64 = \dfrac{408}{6}$ **= 68**

The average marks of Balbir = $50 + 37 + 41 + 40 + 50 + 46 = \dfrac{264}{6}$ **= 44**

The average marks of Chander = $82 + 48 + 91 + 88 + 74 + 73 = \dfrac{456}{6}$ **= 76**

The average marks of Dilraj = $60 + 58 + 62 + 60 + 65 + 67 = \dfrac{372}{6}$ **= 62**

The average marks of Ela = $48 + 51 + 47 + 50 + 51 + 47 = \dfrac{294}{6}$ **= 49**

The average marks of Fatima = $75 + 48 + 70 + 66 + 80 + 75 = \dfrac{414}{6}$ **= 69**

c. Mathematics has the highest average.

d. Hindi has the lowest average.

Students are able to:
- ❖ **Find the average of given data**
- ❖ **Understand the concept and use of the word "*Average*"**

THANKING YOU

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