

a) The Average of a set of values is the sum of the values divided by the number of values in the set.

b) Average is a number which is roughly between the Smallest and the Largest number etc quantity.

c) The average gives us an idea about the general value of a group.

d) The average is the Arithmetical mean value of the numbers of given values.

e)  $\text{Sum of the values} = \text{Average} \times$

3) Do as directed

a) Find the average of 1<sup>st</sup> five prime numbers

The 1<sup>st</sup> five prime numbers = 2, 3, 5, 7 and 11

$$\text{Average} = \frac{2+3+5+7+11}{5} = \frac{28}{5} = 5.6 = 5\frac{3}{5}$$

1) what is the average weight 14g, 16g, 36g, 42g.

$$\frac{108}{4} = \text{Ans} = 27g$$

$$\begin{array}{r} 27 \\ 4 \overline{) 108} \\ \underline{-8} \\ 28 \\ \underline{-28} \\ 0 \end{array}$$

c) Find the average if number of item is 15 and the total value of item is 105.

The total number of item = 15

The total value of items = 105

The average of items = 7

$$\begin{array}{r} 7 \\ 15 \overline{) 105} \\ \underline{-105} \\ 0 \end{array}$$

(d) Find the average of  $\frac{6}{7}, \frac{2}{5}, \frac{11}{7}$

$$\frac{(6 \times 5) + (2 \times 7) + (11 \times 5)}{35} = \frac{30 + 14 + 55}{35}$$

$$\begin{array}{r} 55 \\ 30 \\ \underline{14} \\ 99 \end{array}$$

d)  $\frac{99}{35} \div 3 = \frac{99}{35} \div \frac{3}{1} =$   
 $\frac{33}{35} \times \frac{1}{3} = \frac{33}{35}$  ~~112~~

e) Find the missing value. No. of items are 21 and average is 21. then sum of the items is ~~441~~  
441

3) a) The average height of a family of five is 150cm, if the height of a four family members is 153cm, 150cm, 151cm and 152cm. Find the height of the fifth number.

The average height of a family of five = 150cm  
Total height of fifth member =  $150 \times 5 = 750$ cm  
The height of four family members = 1

$$153\text{cm} + 150\text{cm} + 151\text{cm} + 152\text{cm} = 606\text{cm}$$

Rough!

~~Average~~ The height

153

150

151

152

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606

$$\text{The height of the fifth member} = 750 - 606 = 144$$

- b) The average of 5 numbers is 25 and the average of another 5 numbers is 35. Find the average of the 10 numbers taken together.

$$\text{The average of 5 numbers} = 25$$

$$\text{Total average of 5 numbers} = 25 \times 5 = 125$$

$$\text{The average of another 5 numbers} = 35$$

$$\text{Total average of another 5 numbers} = 35 \times 5 = 175$$

~~The average of the~~

$$\text{The total of 10 numbers} = 125 + 175 = 300$$

$$\therefore \text{Average of 10 numbers taken together} = \frac{300}{10} = 30$$

- c) Mini's father earns on an average of ₹ 9800 a week. How much does he earn in 52 weeks?



Average earning of Mini's father in week = ₹ 9800  
 Total earning in a year =  $9800 \times 52 =$   
 ₹ 5,09,600

$$\begin{array}{r}
 9800 \\
 \times 52 \\
 \hline
 19600 \\
 490000 \\
 \hline
 509600
 \end{array}$$

d) 8 students of a class went for medical checkup. The table shows the record of their weight and age. Find the average age and weight of the students.

| Name    | Age                | Weight |
|---------|--------------------|--------|
| Sonali  | 11 years 10 months | 33 kg  |
| Vandana | 12 years           | 34 kg  |
| Rohit   | 12 years 7 months  | 38 kg  |
| Shweta  | 11 years 6 months  | 33 kg  |
| Vaibhav | 13 years           | 36 kg  |
| Manik   | 12 years           | 32 kg  |
| Zakir   | 11 years 11 months | 36 kg  |
| Chitra  | 13 years 2 months  | 38 kg  |

Age of

Rough

Sonali = 11 years 10 months = 142 months

Age of Vandana = 12 years = 144 months

Age of <sup>Sweta</sup> Rohit = 11 years 6 months = 138 months

Age of ~~Shweta~~ Ronit = 12 years 7 months = 151 months

Age of Vaibhav = 13 years = 156 months

Age of Manika = 12 years = 144 months

Age of Zakir = 11 years 11 months = 143 months

Age of Chris = 13 years 2 months = 158 months

The weight of all 8 students = 33 kg + 34 kg + 38 kg + 33 kg + 36 kg + 32 kg + 36 kg + 38 kg = 280 kg

Ans = ~~30~~ 35

The Age of all 8 student = 142 + 144 + 138 + 151 + 156 + 144 + 143 + 158 = 1034 months

= 147 months = 12 years 3 months

|      |        |
|------|--------|
| 11   | 12     |
| x 12 | x 12   |
| 22   | 24     |
| 110  | 120    |
| 132  | 144    |
| 10   | 13     |
| 142  | x 12   |
|      | 28     |
| 132  | 130    |
| 11   | 156    |
| 1243 | 147    |
| 247  | 338    |
| -12  | 33-8   |
| 27   | 34 37  |
| -24  | 38-32  |
| 3    | 38 56  |
|      | 36 56  |
|      | 36     |
|      | 0      |
|      | +32    |
| 8    | 280 kg |
|      | -28    |
| 142  | 129    |
| 144  | 8      |
| 138  | -8     |
| 151  | 29     |
| 156  | -16    |
| 144  | 74     |
| 143  | -73    |
| 158  |        |
| 1034 | 2      |
| 142  | 176    |

2  
Ans.

4.35 Average of 11.35, 12.65, 11, 7.25,  
14.85, 15.55 =

$$\frac{11.35 + 12.65 + 11 + 7.25 + 14.85 + 15.55}{6}$$

$$= \frac{72.65}{6} = 12.1083$$

Rough

- ②②②
- 11.35
- 12.65
- 11.00
- 7.25
- 14.85
- 15.55

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- 72.65

$$\begin{array}{r} 72.65 \\ \underline{12.1083} \\ 6 \overline{) 72.65} \\ \underline{-6} \\ 12 \\ \underline{-12} \\ 06 \\ \underline{-6} \\ 050 \\ \underline{48} \\ 20 \end{array}$$