

# Worksheet

a The average of a set of values divided by the number of values in the ~~set~~ set

b Average is a number which is roughly between the smallest and the largest number of quantity

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

d The average is the arithmetic mean value of the number of given values

e  $\text{Sum of the values} = \text{Average} \times \text{No. of items}$

Q2 Find the average of 1st prime numbers

First five prime numbers =  
2, 3, 5, 7, 11, ~~13~~

$$2 + 3 + 5 + 7 + 11 = 28$$

$$\frac{28}{5} = 5.6$$

$$5 = 5.6$$

b What is the average weight  
14g, 16, 36, 42

average =

$$\frac{14 + 16 + 36 + 42}{4} = 27$$

$$\frac{108}{4} = 27$$

$$4 = 27$$

c find the average if  
number of items is 15 and  
the total value of items is  
105

$$\text{no. of items} = 15$$

$$\text{total value} = \text{₹} 105$$

$$\frac{105}{15} = 7$$

~~Find the missing value:  
No. of items = 21 and  
average of items is 21 then sum  
of the items is 421~~

Q3

a

Average of a family = 150

total average of a family =  
 $150 \times 5 = 750$

height of 4 members =

153, 150, 151, 152

So sum of the numbers

$$153 + 150 + 151 + 152 = 606$$

$$750 - 606 = 144$$

So the height of 6 birth members is 144 cm

b

A. Average of 5 numbers = 25

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

Average of another 5 numbers = 35

$$\text{Sum of 5 numbers} = 35 \times 5 = 175$$

Sum of 10 numbers =

$$125 + 175 = 300$$

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

Average of 10 numbers is 30

c. Average earnings of mini's father in a week = ₹ 9800

total earning in 52 weeks =

$$9800 \times 52 = ₹ 509600$$

Total earnings of mini's father in 52 weeks is 509600

d) ~~8~~ 8 students of a class went for medical checkup. The average age of the students =

~~8~~ ~~8~~ ~~8~~ ~~8~~

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
Vai bhav	13 years	36 kg
Manik	12 years	32 kg
Zakir	11 years 11 months	36 kg
Chris	13 years 2 months	38 kg

a)

$$11 \times 12 + 10 = 142 \text{ months}$$

$$12 \times 12 = 144 \text{ months}$$

$$12 \times 12 + 7 = 151 \text{ months}$$

$$11 \times 12 + 6 = 138 \text{ months}$$

$$13 \times 12 = 156 \text{ months}$$

$$12 \times 12 = 144 \text{ months}$$

$$11 \times 12 + 11 = 143 \text{ months}$$

$$13 \times 12 + 2 = 158 \text{ months}$$

Average of age :-

$$142 + 144 + 151 + 138 + 156 + 144 + 143 + 158 =$$

$$\frac{1176}{8} = 147 \text{ months} =$$

$$= 12 \text{ years } 3 \text{ months}$$

∴ So the average age of 8 students is 147 months / 12 years 3 months

b) average of weight :-

$$33 + 34 + 38 + 33 + 36 + 32 + 36 + 38$$

$$\frac{280}{8} = 35$$

So the average weight of 8 students is 35 kg

e

Average =

$$\frac{11.35 + 12.65 + 11.75 + 14.85 + 15.55}{5}$$

~~72.65~~ - ~~12.108~~

$$\frac{72.65}{6} = 12.108$$

Q2

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

A ~~30/110~~ The sum of the given quantities =

$$\frac{6}{7} + \frac{2}{5} + \frac{11}{7} =$$

$$\frac{(6 \times 5) + (2 \times 7) + (11 \times 5)}{35}$$

$$\frac{30 + 14 + 55}{35} = \frac{99}{35}$$

No. of quantities = 3

Average =

$$\frac{99}{35} \div 3 = \frac{99}{35} \times \frac{1}{3} = \frac{33}{35}$$

e find the missing value;  
No. of items are 21 and  
average is 21 then sum of the  
items is

A. value = Average  $\times$  No. of items

$$\begin{array}{r} 21 \\ \times 21 \\ \hline 21 \\ + 420 \\ \hline 441 \end{array}$$

the missing value is 441