Worksheet

Ch-11 AVERAGE

Q1> Fill in the blanks

a> average

b> greatest

c> group

d> arithmetic mean

e> number of values

Q2>

a> = 2, 3, 5, 7, 11

= 28 ÷ 5

= 5.6

Rough

5.6
5 | 28
-25
30
-30
0

b> = 14 g, 16g, 36 g, 42g

= 108 ÷ 4

= 27

ROUGH

42
36
16
14
108

c> = 105 ÷ 15 = 7

d> = $\frac{6}{7}, \frac{2}{5}, \frac{11}{7}$

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

= $\frac{99}{35} \div 3$

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

e> = 21 × 21

= 441 = Sum of items

Q 3)

a)

Ans) ·> Average height of the family = 150 cm

·> No. of family members = 5

·> Total height of the family = 150 x 5 = 750 cm

·> Height of:

·> first family member = 153 cm
·> Second family member = 150 cm
·> Third family member = 151 cm
·> Fourth family member = 152 cm
·> Total height of first four family members = 606 cm
·> Height of fifth family member = 750 - 606 cm
= 144 cm

·> So, the height of fifth member is 144 cm.

b) ·> Average of first 5 numbers = 25

·> Sum of first five numbers = 25 x 5 = 125

·> Average of next 5 numbers = 35

·> Sum of next 5 numbers = 35 x 5 = 175

·> Sum of all 10 numbers = 175 + 125 = 300

·> Average of all ten numbers = 300 ÷ 10 = 30

·> So, the average of all 10 numbers is 30

c) → Average money earned in a week
= ₹9800

→ Money earned in 52 weeks
= ₹9800 × 52

```
  9800
 × 52
 19600
490000
5,09,600
```

→ ∴ Mini's father earns ₹ 5,09,600 in 52 weeks.

d) → Average Age of:

Sonali = 11 years 10 months = (12×11)+10
= 132 + 10 = 142 months

Vandana = 12 years = 12 × 12 = 144 months

Rohit = 12 years 7 month = (12×12) + 7
= 144 + 7 = 151

Shweta = 11 years 6 months = (12×11) + 6
= 132 + 6 = 138 months

Vaibhav = 13 years = 13 × 12 = 156

Manik = 12 years = 12×12 = 144 months

Zakir = 11 years 11 months = (11×12) + 11
= 132 + 11
= 143 months

Chris = 13 years 2 months = (13×12) + 2
= 156 + 2
= 158 months

→ Average Age

$$= \frac{132 + 144 + 151 + 138 + 156 + 144 + 158 + 143}{8}$$

$= \frac{1166}{8} = 145.75$ months

$= 12$ years $1\frac{3}{4}$ month

-> ~~Average~~ Weight of:

Soneli = 33 kg
Vandana = 34 kg
Rohit = 38 kg
Shweta = 33 kg
Vaibhav = 36 kg
Manik = 32 kg
Zakir = 36 kg
Chris = + 38 kg
-> Total weight = 280 kg

-> Average weight

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

(35 over 1)

-> So, the average age and weight of the 8 students are 12 years $1\frac{3}{4}$ months and 35 kg respectively.

ROUGH

132
144
151
138
156
144
158
143
1166

145.75
8 | 1166
-8
36
-32
46
-40
60
-56
40
-40
0

12.14
12 | 145.75
-12
25
-24
17
-12
55
-48
7

e) Average = $\frac{11.35 + 12.65 + 11 + 7.25 + 14.85 + 15.55}{6}$

$= \frac{\frac{7}{12.65}}{6}$

ROUGH

e

$$\frac{72\frac{65}{100}}{6} = \frac{72\frac{13}{20}}{6}$$

$$= \frac{1453}{20} \times \frac{1}{6} = \frac{1453}{120}$$

$$= 12\frac{13}{120}$$

$$= 12.108334$$

∴ So, the average of these numbers is $12.108334 / 12\frac{13}{120}$.

ROUGH

```
      0.10833
120 ) 13.0
    - 120
      100
    -   0
      1000
    - 960
      400
    - 360
       40
    -  36
       4
```