

1. (a) The average of a set of values

is the sum of the values divided

by the no. of values in set

(b) Average is a no. which is ~~roughly~~

~~between~~ between the smallest and

~~largest~~ the, no. of 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 no. of

the given values.

(e) Sum of the values = Average X

No. of quantities.

~~(a)~~ First five prime numbers,

= 2, 3, 5, 7, 11

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

$$= \frac{28}{5} = 5 \frac{3}{5}$$

(b) Average = $\frac{4+16+36+42}{4}$

~~108~~
~~136~~ ~~108~~
~~4~~ ~~4~~

~~27~~

Average weight = 27g

(c) Average = $\frac{105}{7} = 15$

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(d) Average = $\frac{6}{7} + \frac{2}{5} + \frac{11}{7} \div 3$

= $\frac{6 \times 5 + 2 \times 7 + 11 \times 5}{35} \div 3$

= $\frac{30 + 14 + 55}{35} \div 3$

= $\frac{99 + 55}{35} \div 3$

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

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

= $\frac{33}{35}$

(e) No. of items = 21
Sum of the items = ?
Average = 21

Average = $\frac{\text{Sum of the items}}{\text{No. of items}}$

Sum of items = Average \times No. of items
= 21 \times 21

= 441

So, the sum of the items is 441.

3. (a) Average height = 150 cm
height of 4 member = 153 cm, 150 cm, 159 cm, 152 cm
height of 5th member = Average \times Sum of all

~~digit~~ Total height of 5 member = Average \times No. of member

= 150 \times 5
= 750 cm

Total height of 4 members = $153 + 150 + 151 + 152$
= 604 cm

Height of 5th member = Total height of 5 members - Total height of 4 members
= 750 - 604 cm = 146 cm

∴ Height of 5th member = 146 cm

(b) Average of 5 no. is 25
Average of another 5 no. = 35
Average of 10 no. = $\frac{\text{Average} \times \text{Sum of 5 no.} + \text{Sum of another 5 numbers}}{10}$
= $\frac{25 \times 5 + 125}{10}$
= $\frac{35 \times 5 + 75}{10}$
= $\frac{175 + 175}{10}$
= 35

= $\frac{300}{10} = 30$

(c) Average earn = 79800
No. of weeks = 52
earn in 52 weeks = 9800×52
= 509,600

So, Mini's father earn in 52 weeks = \$ 35,09,600.

(d) average age = 11 yrs 10m + 12 yrs
+ $\frac{12y7m + 11y6m + 13y + 12y + 14y1m + 15y2m}{8}$
= $\frac{95y + 36m}{8} = \frac{98y}{8} = \frac{49y + 12m}{4}$

Average wt = $\frac{33 + 34 + 38 + 33 + 36 + 32 + 34 + 280}{8} = \frac{350}{8} = 35 \text{ kg}$

$$e \text{ Average} = 11.35 + 12.65 + 11 + 7.25 + 14.8 + 15.5$$

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$$= \frac{72.65}{6} = 12.10$$