Section B

Question No: 6

(a)

Solution:

Age of son = 30 year

Let

Age of father = x

Age of son = $y = 30$

5 years ago:

Age of father = 3 (Age of sun)

$$x - 5 = 3(y - 5)$$

$$x - 5 = 3(30 - 5)$$

$$x - 5 = 75$$

$$x = 75 + 5 = 80 \text{ years}$$

So, the age of the father is 80 years.

(d)

(i) 8, 4, 32, 7, 5 ___

In the given series the first two numbers are multiplied and third number is the result of multiplication of first two numbers.

Similarly, the numbers four and five are again multiplied and the result of multiplication is 35.

8, 4, 32, 7, 5, 35

(c)

Arithmetic mean of 6 numbers = 20

Total numbers = 6

By applying formula of mean

$$\text{Mean} = \frac{\text{Sum of number}}{\text{Total number}}$$

$$20 = \frac{\text{Sum of numbers}}{6}$$

$$20 \times 6 = \text{Sum of numbers}$$

Sum of numbers $(x) = 120$

When one number is removed from six number then

$$15 = \frac{x-1}{5}$$

$$15 \times 5 = x-1$$

$$75 = x-1$$

$$x = 76$$

Question no: 7

(a)

Diameter of round table = 7m

Distance = ?

Distance of a round table is actually the circumference of the table

$$C = 2\pi r$$

As we know that

$$r = \frac{d}{2} \Rightarrow r = \frac{7}{2} = 3.5$$

By Putting these values into formula

$$C = 2 \times 3.14 \times 3.5$$

$$C = 21.98$$

So the distance covered by a person will be 21.98 m.