

" General Science and Ability "

Part II

Q: I Survey of 100 people Cricket and Hockey?
(a)

Ans: Data :

$$\text{Total People} = 100.$$

$$\text{Cricket} = 65$$

$$\text{Hockey} = 40$$

$$\text{Neither} = 20.$$

$$\text{Both} = ?$$

Solution :

Total no. of people - neither watch.

$$= 100 - 20 = \boxed{80}$$

80 people watch atleast one game.

Now,

Cricket + Hockey - Both = atleast one game

$$65 + 40 - x = 80.$$

$$105 - x = 80.$$

$$x = 105 - 80.$$

$$x = \boxed{25}$$

↳ Watch both games.

Q:7 A rectangular ... 2.5 metres?
(b)

(d)

Ans:

Ans: Data:

$$\text{width} = x$$

$$\text{length} = x + 4$$

$$\text{Perimeter} = 72 \text{ m}$$

$$\text{Depth} = 2.5 \text{ m}$$

$$\text{Volume} = ?$$

Solution:

$$\text{Perimeter} = 2(l + w)$$

$$72 = 2[(x + 4) + x]$$

$$72 = 2(2x + 4)$$

$$72 = 4x + 8$$

$$x = \frac{72 - 8}{4}$$

$$x = \frac{64}{4}$$

$$x = 16 \text{ m} \leftarrow \text{width}$$

$$x + 4 = 16 + 4 \leftarrow \text{length}$$
$$= 20 \text{ m}$$

$$\text{Volume} = l \times w \times d$$

$$= 20 \times 16 \times 2.5$$

$$= 800 \text{ m}^3$$

$$= 800,000 \text{ litres}$$

(d) The sum of current ages ?

Ans: Data:

Sum of present ages = 75 years.

10 years ago:

$$\text{Son} = x.$$

$$\text{Father age} = 4x.$$

✓ Present Ages = ?

Solution:

	Past	Present
Father.	$A - 10$	A
Son.	$4(B - 10)$	$+ B$
		75

$$A - 10 = 4(B - 10)$$

$$A - 10 = 4B - 40$$

$$A = 4B - 30 \rightarrow \text{present age of father.}$$

Now.

$$A + B = 75$$

$$4B - 30 + B = 75$$

$$5B = 75 + 30$$

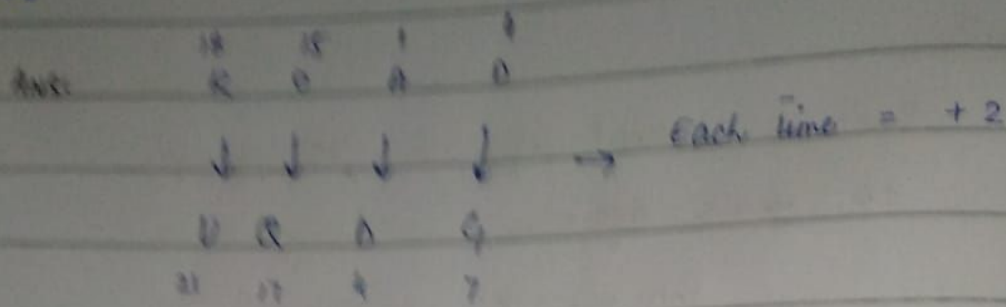
$$B = \frac{105}{5} = 21 \text{ — Son}$$

$$\therefore A = 4(21) - 30$$

$$= 84 - 30$$

$$= 54 \text{ — Father}$$

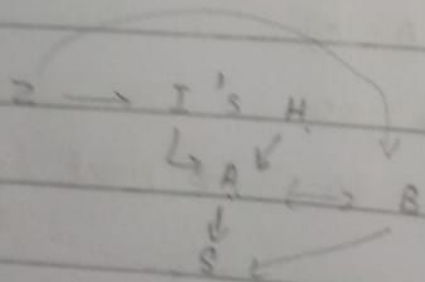
Q. 8. In which ... ending ?



L A K E

O D N H

Q. A man tells ... the man ?



Niece - in - law

c) Next number:

$$\begin{array}{ccccccc} & +2 & & +3 & & +4 & \\ 4, & 12, & 6, & 18, & 9, & 27, & 13, & 39 \\ & \times 3 & & \times 3 & & \times 3 & & \times 3 \end{array}$$

$$\begin{array}{ccccccc} 1, & 2, & 6, & 24, & 120, & 720 \\ 1 \times 2 & 2 \times 3 & 6 \times 4 & 24 \times 5 & 120 \times 6 \end{array}$$

d) Five friends:

P, Q, R, S, T

T 180 cm

S

→ Q 165 cm

R

P 150 cm

3rd = Q

maxi range = 180 cm.