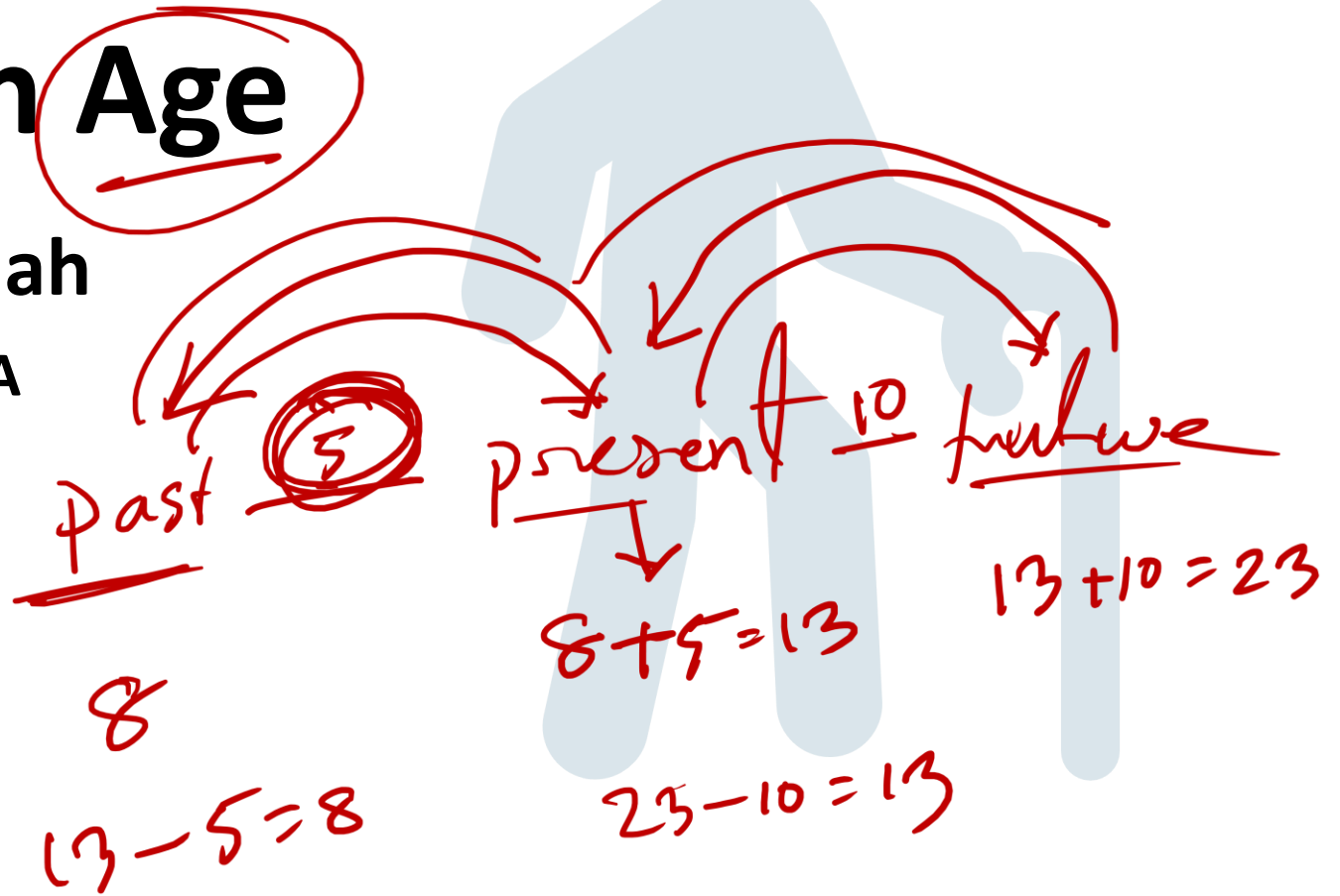




Problems on Age

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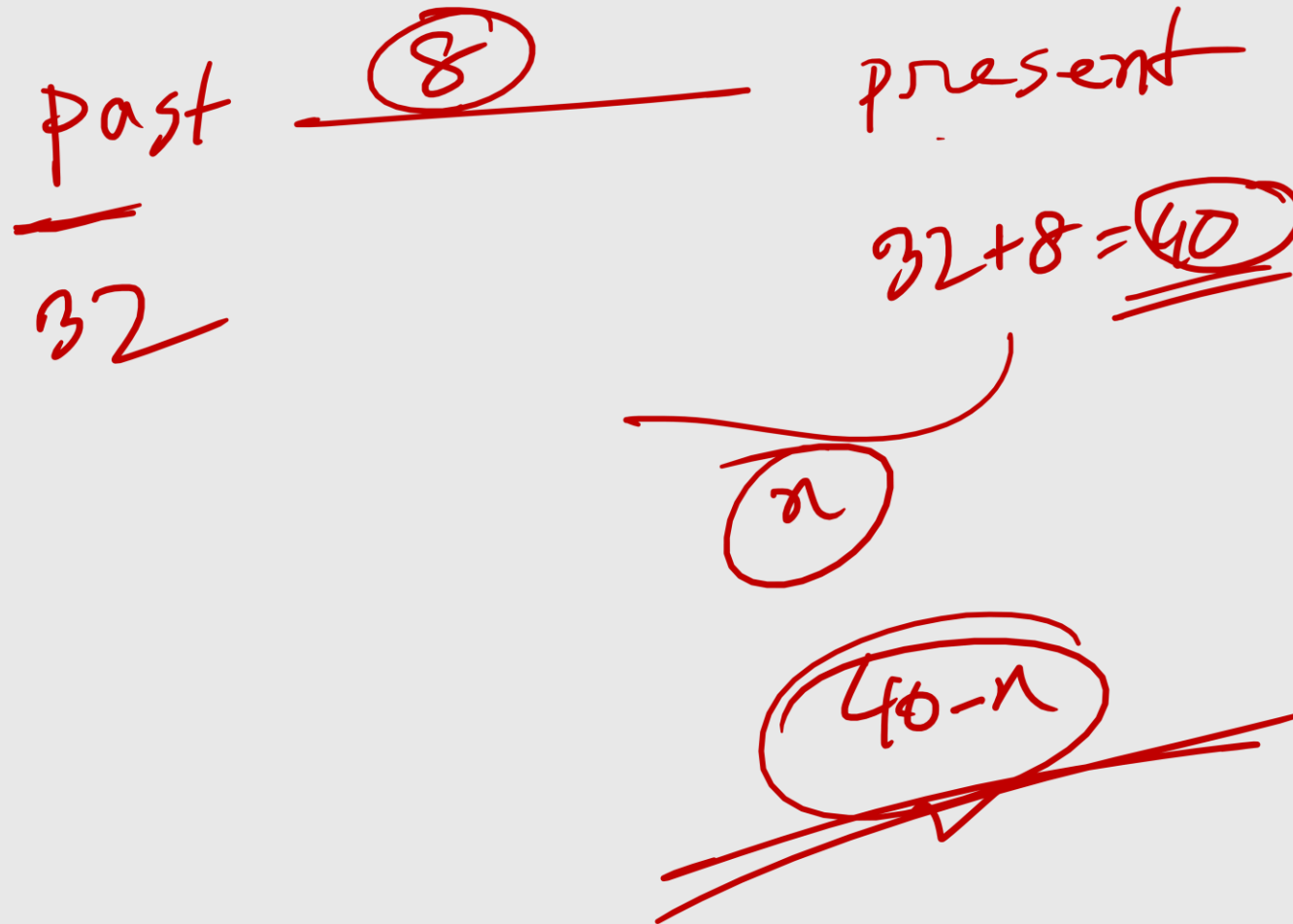


Type - 1

General Questions

Q1: If Mario was 32 years old 8 years ago, how old was he x years ago?

[Comb (Off) - 22]



Q2: The sum of ages of 5 children born at intervals of 3 years each is 50 years. What is the age of the youngest child? [Comb (Cash)-19]

Let, the age of children be x , $x+3$, $x+6$,
 $x+9$, $x+12$

$$\text{AtoQ, } x+x+3+x+6+x+9+x+12 = 50$$

$$\Rightarrow 5x = 50 - 30 = 20$$

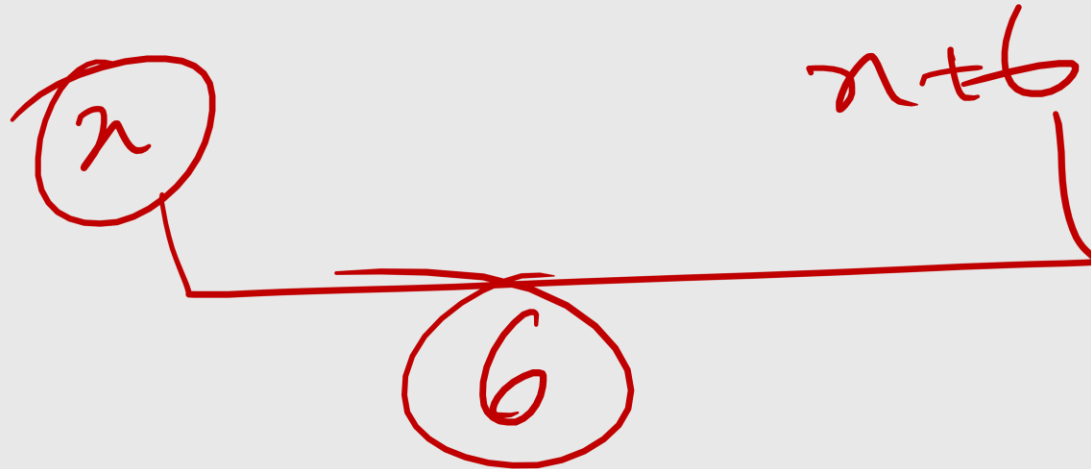
$$\Rightarrow x = \underline{\underline{4}}$$

Q3: A is 3 years older than B and 3 years younger than C. B and D are twins. How older is C than D? [Comb (Cash)-23]

A
 $x+3$

B, D
 x

C
 $x+3+3 = x+6$



Type - 2

Equation Related

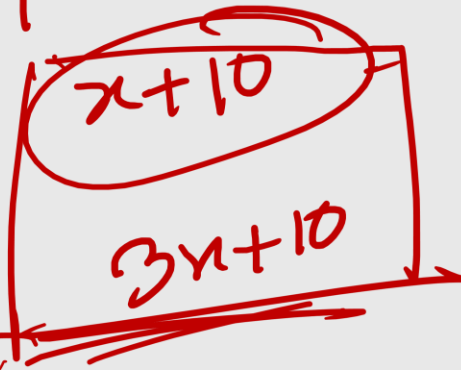
Q4: The sum of the ages of the father and son is 80 years. If ten years ago, the age of father was three times that of his son. Find the present age of the son. [Comb (Off)-23]

$$80 - 20 = 60$$

past $\xrightarrow{10}$ present

S \rightarrow x

F \rightarrow $3x$



$$15 + 10 = \underline{\underline{25}}$$

$$x + 3x = 60$$

$$x = \underline{\underline{15}}$$

$$x + 10 + 3x + 10 = 80$$

$$x + 3x = 80 - 20$$

$$4x = 60 \Rightarrow \underline{\underline{x = 15}}$$

Q5: The sum of the present ages of a father and his son is 60 years. Six years ago, father's age was five times the age of the son. After 6 years, son's age will be- [Comb (SO)-19]

$$\begin{array}{l}
 \text{S} \rightarrow x \\
 \text{F} \rightarrow 5x
 \end{array}$$

past $\xrightarrow{6}$ present $\xrightarrow{6}$ Future

$$\begin{array}{l}
 x+6 \\
 5x+6
 \end{array}$$

$$\begin{array}{l}
 \text{Future } 8+12=20 \\
 x+6+6 = x+12 \\
 5x+12
 \end{array}$$

$$x+6 + 5x+6 = 60$$

$$6x = 60 - 12 = 48$$

$$x = 8 \text{ yr}$$

Q6: Today is Ratul's 12th birthday and his father's 40th birthday. How many years from today will Ratul's father be twice as old as Ratul's at that time?

$$\text{Ratul} = \underline{12y}$$

$$\text{Father} = \underline{40y}$$

$$12+x$$

$$40+x$$

$$2(12+x) = \underline{40+x}$$

$$24+2x = 40+x$$

$$x = 16$$

Type - 3

Ratio Related

Q7: At present, the ratio between the ages of Karim and Rahim is 4:3. After 6 years, Karim's age will be 26 years. What is the age of Rahim at present?

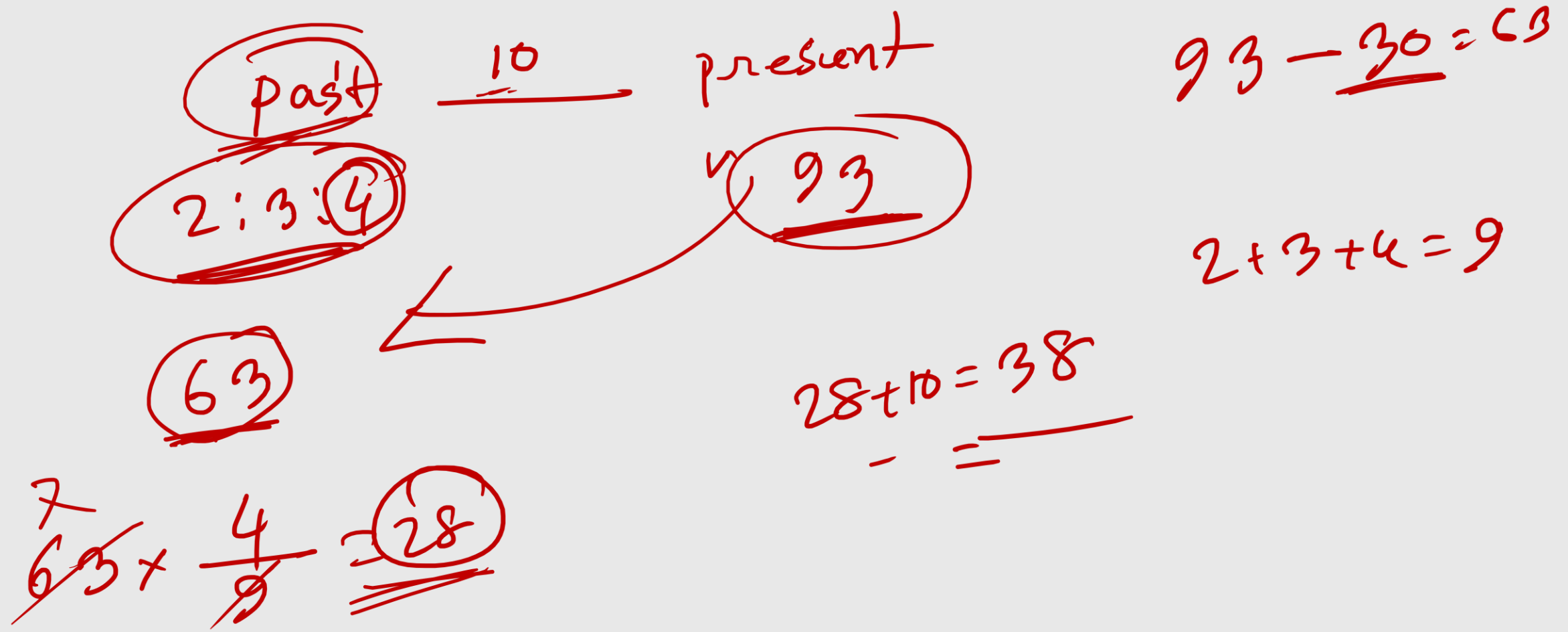
[Pubali Bank (SO)-23]

20

4 : 3
↓
20 : 15

Q8: The total of the ages of Ali, Gazi and Masud is 93 years. Ten years ago, the ratio of their ages was 2 : 3 : 4. What is the present age of Masud? [BB

(Cash)-16]



Q9: The present age of three persons are in the proportion of 4:7:9. Eight years ago, the sum of their ages was 56 years. The present age of the eldest person is [BB (AD)-23]

part 8
56

present
4:7:9
 $56 + 24 = 80$

$$\frac{4}{80} \times \frac{9}{20} = \underline{36}$$

Q10: The age of A and B are in the ratio 3 : 1. Fifteen years hence, the ratio will be 2 : 1. Their present ages are- [BB (AD)-16]

a) 30, 10

~~b) 45, 15,~~

c) 60, 20,

d) 21, 7

~~X~~ 45 25

60, 30

Let, the age of A = $\frac{3n}{1}$ and B = $\frac{n}{1}$

After 15 years, A = $\frac{3n+15}{1}$, and B = $\frac{n+15}{1}$

At 15, $\frac{3n+15}{n+15} = \frac{2}{1} \Rightarrow 1(3n+15) = 2(n+15)$
 $n=15$

Q11: The ages of Sabiha and Suriya are in the ratio of $7x:3x$ respectively.

After 6 years, the ratio of their ages will be $5:3$. What is the difference in their ages [Janata Bank (RC)-23]

$$\Rightarrow \overset{sa}{(7x+6)} = \overset{su}{5(3x+6)}$$

$$7x - 3x = 4x$$

$$4 \times 2 = 8$$

$$\Rightarrow 21x + 18 = 15x + 30$$

$$\Rightarrow 6x = 12$$

$$x = 2$$

Q12: Rahim is 40 years old and Karim is 60 years old. How many years ago was the ratio of their ages 3:5?

~~60:40~~

55:35

50:30

R → 40
K → 60

40-x

60-x

- a) 5
- ~~b) 10~~
- c) 15
- d) 20

~~5:3~~

$$\frac{40-x}{60-x} = \frac{3}{5}$$

$$5(40-x) = 3(60-x)$$

$$\Rightarrow x = 10$$

Type - 4

Times Related



Q13: A man is now 3 times as old as his son. In 10 years' time, the sum of their ages will be 76. How old was the man when his son was born? [Comb (cash)-22]

Let, present age of son is $x = 14$
" " " Father = $3x = 3 \times 14 = 42$

$$\text{A+Q, } x + 3x = 76 - 20$$

$$\Rightarrow 4x = 56$$

$$\Rightarrow x = 14$$

Father's age at his son's birth = $42 - 14$ years
= 28 years

Q14: A man's age is now 3 times his son's age. Eight years back, the man's age was 5 times his son's age. What is the present age of the son? [Comb (Cash)-23]

Let t , present son $\Rightarrow x$ Father $\Rightarrow 3x$

$$\text{At 8, } 5(x-8) = 3x-8$$

$$5x - 40 = 3x - 8$$

$$2x = 32$$

$$x = 16$$

Q15: Mother's age today is thrice as her daughter's. After 10 years it would be just double. How old is the daughter today? [Janata Bank (AEO)-19]

(H.W)

Ans: 10 years.

Q16: Present age of Fariha is thrice the present age of Samira who is 20. How many years ago was the age of Fariha five times that of Samira? [BB (Cash)-23]

$$\text{Samira} = 20$$

$$\text{Fariha} = 60$$

$$\frac{60}{5} = 10$$

$$5(20 - x) = 60 - x$$

$$100 - 5x = 60 - x$$

$$40 = 4x \Rightarrow \underline{\underline{x = 10}}$$

Thank You