Problems on Ages

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OnlineStudy4u

Placement for All.. All for Placement

This Video Completely covers the problems on Ages which is more than sufficient for all kind of placement Exams eg: TCS/WIPRO/AMCAT/ELITMUS/CoCubes and all other placement Exams.

Problems on Ages

Concepts:

1) If the present age of a person is "x" years old.
Then the age 5years hence/after will be= "x+5"
Then the age 5years before/ago= "x-5"

25
30
35

2). If A ages after 2 years will be twice the age of B.
(A+2) = 2 (B+2)

(A+2) = 2 x (B+2)

(A+2) : 2 x B

3). If ratio of ages of A:B is 2:3, then in terms of value we can write.
A=2x years
B=3x years

A : 2x
B : 3x

Problems on Ages

Q1. Raju age after 15 years will be 5 times his age 5 years back, What is the present age of Raju?

a)15 b)14 c)10 d)8

Solution:

Raju present age : R

after 15 years : (R+15)

before 5 years (R-5)

$R+15 = 5 \times (R-5)$

$R+15 = 5R-25$

$4R = 15+25$

$4R = 40$

$R = \frac{40}{4} = 10$

Problems on Ages

Q2. Ten years ago, P was half of Q in age. If the ratio of their present ages is 3:4. what will be the total of their present ages.

a. 35years b.34years c.25years d.45years

Solution:

Normal

P : Q = 3 : 4

P = 3x

Q = 4x

10 years ago

$\frac{(3x-10)}{1} = \frac{1}{2}(4x-10)$

$6x - 20 = 4x - 10$

$2x = 10$

$x = 5$

3x+4x

7x

7×5 = 35

Trick

7

14

21

7x

Problems on Ages

Q3. The Ages of Pratik and Garima are in the ratio of 6:7. after 6 years the ratio of their ages will be 15:17. What is the present age of Garima.

a. 22years b.32years c.26years d.28years

Short

P : 6x

G : 7x : 7×4 = 28

$\frac{6x+6}{7x+6} = \frac{15}{17}$

$102x + 102 = 105x + 90$

$3x = 12$

$x = 4$

Problems on Ages

Q4. Sachin is younger than Rahul by 7 years. If the Ratio of their ages is 7:9.find the age of Sachin.

a. 23.5years b.24.5years c.12.5years d.14.5years

Normal

S = R − 7

S : R = 7 : 9

$\frac{S}{S+7} = \frac{7}{9}$

$9S = 7S + 49$

$2S = 49$

$S = 24.5$

R − S = 7

7 : 9

2

2 — 7

1 — 3.5

7 — 3.5 × 7

= 24.5

Problems on Ages

Q5. The ages of kumar and Raja are in the ratio of 7:4, after 5years the ratio of their ages will be 11:7. find the present age of kumar.

a. 12years b.14years c.15years d.28years

$K = 7x$

$R = 4x$

$\frac{7x+5}{4x+5} = \frac{11}{7}$

Short trick

K : R

7 : 4

14 | 28

+5 | +5

19 | 33

11 : 7

Problems on Ages

Q6 The sum of Ages of A and B is 81 years and The ratio of their ages are 4:5. Find present ages of A and B is ?

A : B = 4 : 5

$A = 4x = 36$

$B = 5x = 45$

$4x + 5x = 81$

$9x = 81$

$x = 9$

Problems on Ages

Q7. The sum of Ages of Ramesh and Kamal is 84years.6 years ago the ratio of their ages were 5:7.Find out the present ages of Ramesh and Kamal.

a)36, 48 b)49,54 c)52,60 d)None

Normal

$R + K = 84$ ✓

$= R - 6 + K - 6$

$= R + K - 12$

$84 - 12$

$= 72$

6 years

$R = 5x = 30 + 6 = 36$

$K = 7x = 42 + 6 = 48$

$5x + 7x = 72$

$12x = 72$

$x = 6$

Short tricks

36, 48 → Ans

-6 | -6

30 : 42

5 : 7

Problems on Ages

Q8) The sum of Ages of 5 children born at the intervals of 3years each, is 50 years. What is the age of youngest child?

a)4years b)8years c)10years d)12years

$4 + 7 + 10 + 13 + 16 = 50$

Problems on Ages

Q9. The ratio of the ages of the mother and daughter of present is 19:5 after 4 years the ratio will become 3:1. what is the sum of the present ages of the mother and daughter?

a. 40years b.48years c.42years d.None

Normal

$M = 19x$
$D = 5x$
$24x = 24 \times 2 = 48$

$\frac{19x+4}{5x+4} = \frac{3}{1}$

$19x + 4 = 15x + 12$

$4x = 8$

$x = 2$

Short

$19 + 5 = 24$

Problems on Ages

Q10) The age of a person is thrice the total ages of his 2 daughters. 0.5 decades hence, his age will be twice of the total ages of his daughters. Then what is the father's current age?
[0.5 Decades = 5 Years]

A) 35 years B) 40 years
C) 45 years D) 49 years

Short

$F = 3 \times (D_1 + D_2)$

3×15 (5 + 5 = A)

$F = 3A$ -①

$\Rightarrow (F+5) = 2 \times (A+10)$

$F + 5 = 2A + 20$

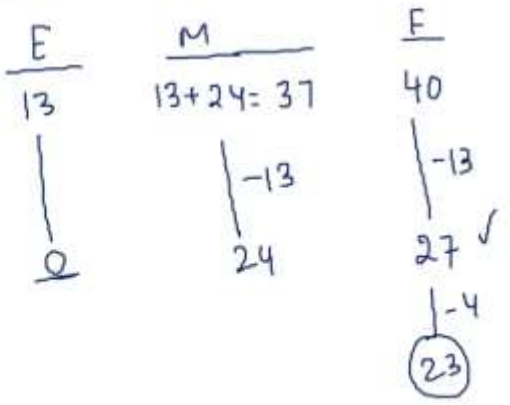
$3A - 2A = 15$

$A = 15$

Problems on Ages

Q11. Ena was born 4 years after her parents marriage. Her mother is three years younger than her father and 24years older than Ena, who is 13years old.at what age Ena's father get married?

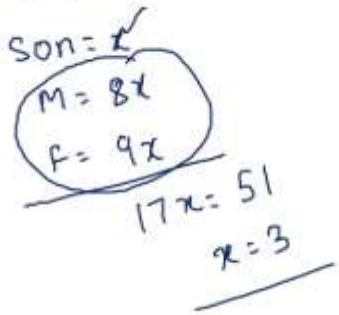
a. 22years b.23years c.24years d.25years



Problems on Ages

Q12. A father is 9times as old as his son and the mother is eight times as old as the son. The sum of the father's and the mother's age is 51years old. What is the age of son?

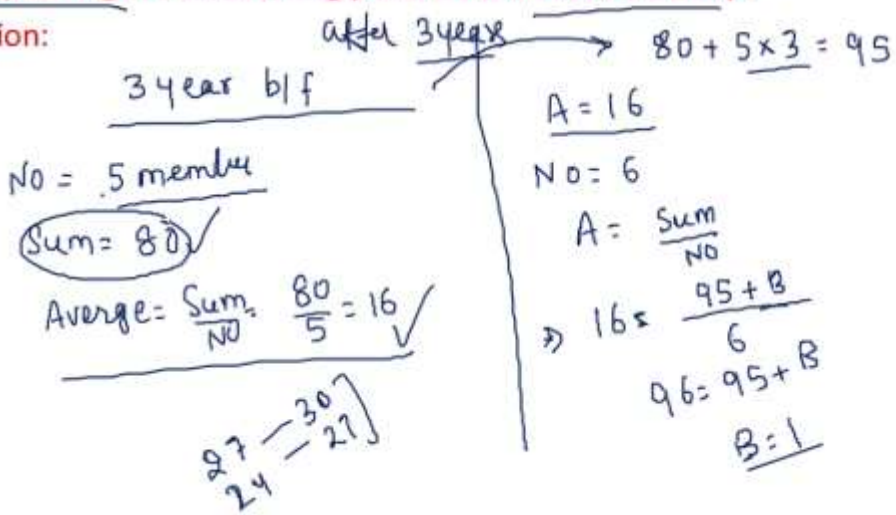
a. 7years b.5years c.4years d.3years



Problems on Ages

Q13. The sum of ages of 5members comprising a family, 3years ago was 80years. The average age of the family today is the same as it was 3years ago, because of an addition of a baby during the intervening period. How old is the baby?

Solution:



Problems on Ages

Q14) The present average age of a family of five members is 26 years. If the present age of the youngest member in the family is ten years, then what was the average age of the family at the time of the birth of the youngest member ? (Assume no death occurred in the family since the birth of the youngest)

A) 19 years B) 16 years

C) 18 years D) 20 years

Solution:

Present

$Avg = \frac{Sum}{NO}$

$26 = \frac{Sum_5}{5}$

$Sum_5 = 26 \times 5 = 130$

30

20

10 years before

Memb = 4

$= 130 - 10 - 4 \times 10$

$= 130 - 50 = 80$

$Avg = \frac{80}{4} = 2$

Problems on Ages

Q15. Raju got married 8years ago. His present age is 6/5 times his age at the time of his marriage. Raju's sister was 10years younger to him at the time of his marriage. The present age of Raju's sister is ?

A) 30 B) 32

C) 38 D) None

Solution:

8 years ago

Raju: $R \checkmark = 40$

Present

$R + 8 \checkmark = 48$

$\Rightarrow \frac{R+8}{1} = \frac{6}{5} \times R$

$48 - 10 = 38$

$5R + 40 = 6R$

$R = 40$

Problems on Ages

Q16) A person says that his son is 5 times as old as his daughter and his wife is 5 times older than his son and he is twice the age of his wife . The sum total of all the ages equals the age of the grand mother who celebrated her 81st birthday today. How old was his son?

A) 50 yrs B) 25 yrs

C) 72 yrs D) 40

Solution: (e) None

$d = x$

$S = 5x = 5 \times 1 = 5$

$W = 5 \times 5x = 25x$

$F = 2 \times 25x = 50x$

$x + 5x + 25x + 50x = 81$

$81x = 81$

$x = 1$

Problems on Ages

Q17. Ram was asked his age by his friend . The Ram said, "The number you get when you subtract 25 times my age from twice the square of my age will be thrice your age". If the friend's age is 14, then the age of the Ram is :

A.21 B.28 C.14 D.25

Solution:

Ram = x

$2x^2 - 25x = 3 \times 14$

quadratic

$\Rightarrow 2x^2 - 25x - 42 = 0$

$\Rightarrow 2x^2 - 28x + 3x - 42 = 0$

$2x(x-14) + 3(x-14) = 0$

$x - 14 = 0 \quad x = 14$

2 | 2×42

2×3×7

✓

Problems on Ages

Q18. When Usha was thrice as old as Nisha, her sister Asha was 25, When Nisha was half as old as Asha, then sister Usha was 34. their ages add to 100. How old is Usha?

a. 37 b. 44 c. 45 d. 40

Solution:

Asha=25 Nisha =n Usha =3n

Asha=2a Nisha =a Usha =34 ✓

The difference of all ages must be same

25-2a=n-a=3n-34

We will get two equation

2n+a=34 ✓

n+a=25 ✓

From the equation we will get n=9 and a=16

The ages are Asha=2a=32 Nisha =16 and Usha =34

Sum of the ages =100

(32+x)+(16+x)+(34+x)=100 ✓

82+3x=100

3x=18 ✓

x=6

Age of Usha =34+6=40

A=25, N: 9, U: 27) 7) 7

✓A=32 N: 16 U: 34) 7

after x

40

34+6=40

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24 hours