AGES

1.) Ram is three times as old as Sam. 2 years ago he was 5 times as old as Sam. What is his present age

Past		Present
R-2		R
S-2		S

$R-2 = 5(S-2)$ $R = 3S$

$3S-2 = 5S-10$

$S = 4$

$3(S) = 3(4) = 12$ age of Ram = 12

2.) 12 years ago, age of P was 3 time the age of Q, After 12 yrs, ratio of ages Q to P will be 2:3 what is Present age of P

-12	Present	P+12
P-12	P	P+12
Q-12	Q	Q+12

$P-12 = 3(Q-12)$ $\frac{Q+12}{P+12} = \frac{2}{3}$

$P = 3Q - 24$ yrs

$\frac{Q+12}{3Q-24+12} = \frac{2}{3}$

$Q = 20$ yrs

$P = 36$ yrs

3) Rohan ... he ... ages ... old is

4.) Roh... eigh... the ... wo...

3) Rohan is as much younger than Ajay as he is older than Meera. The sum of ages of Ajay and Meera is 108 yrs. How old is Rohan

M < R < A

Mean of Ajay = 108

$\frac{\text{mean of Ajay}}{2} = \frac{108}{2} = 54$ years

4) Rohan's age is five times Ajay's and seven eighteenth of Meera's age. The sum of the ages of all three is 137 yrs. How much younger is Ajay to Meera

Ajay : A R : 5A yrs R : $\frac{7}{18}$ Meera

$m = \frac{8}{17} R = \frac{90A}{17}$

$A + 5A + \frac{90A}{17} = 137$

$A = 7$

$R = 5A = 35$

$M = \frac{90A}{7} = 90$

$90 - 7 = 83$ years diff

5) Ram & Shyam average is 65 years. The average age of both Shyam & John is 53 yrs. what is age of J.

$$\frac{R+S}{2} = 65 \qquad R+S = 130 \quad (1)$$

$$\frac{R+S+J}{3} = 53 \qquad 130+J = 159$$

$$J = 29 \text{ years}$$

6) The average age of 10 students and their teacher is 15 years. The average of first seven students is 15 years and that of last three is 11 years. what is the teachers age

$$\text{avg} = \frac{S_{10}+T}{11} = 15$$

$$\text{avg} = S_{10}+T = 165 \text{ yr}$$

$$S_7 = \frac{S_7}{7} = 15 \qquad 105 \text{ yr}$$

$$S_3 = 33 \text{ yr}$$

$$\frac{S_7+S_3+T}{11} = 15$$

$$105 + 33 = 138 \text{ yr}$$

$$T = 27 \text{ years}$$

7) The average age of a group of 4 friends is 36 years. The youngest friend amongst them is 6 years old. What was average age of group at the time of birth

Avg = 36 = $\frac{Sq}{4}$

Sq = 144 yrs

6 years ago
$-4 \times 6 = -24$

144 − 24 = 120 (Sq(6))

one guy was just born so now

Av (6 yrs) = $\frac{S}{3} = \frac{120}{3}$ = 40 years

8) Average age of family of 4 members was 19 years, 4 years back. Birth of new child but average age of the family same even today. How old is child?

P-
$+4 \times 4 = 16$
Sq = 92 yrs

$19 = \frac{Sq}{5}$

Sq = 76

K - child age

A- = $\frac{S}{4} = \frac{92+K}{5}$ ⇒ K = 3 years