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Problems on Ages Questions for SBI PO Pre, IBPS PO Pre, SBI Clerk Mains, IBPS Clerk Mains & LIC AAO Exams.

Direction: Read the following questions carefully and choose the right answer.

1. Rajeev's present age is 100/3 % of his father's age and his father's age is half of Rajeev's grandfather's age. The average of the present ages of all of them is 110/3 years. What was the ratio of their ages 10 years ago?

A. 1 : 43 : 56 B. 1 : 23 : 56 C. 1 : 23 : 46 D. 1 : 26 : 56 E. None of these

2. Arjun is 2 years younger to Bhuvan whose age is 12 years. When 10 years are subtracted from the present age of Shanju and then the result is divided by 6, the present age of his grandson Arjun is obtained. Then what is the ratio of ages of Arjun, Bhuvan and shanju?

A. 5 : 6 : 35 B. 7 : 2 : 23 C. 7 : 2 : 35 D. 5 : 6 : 23 E. None of these

3. The sum of ages of Rahul and Ravi is equal to sum of the ages of Nitin and Nishant ten years from now. Ravi is older than Nishant by 5 years. The ratio of age of Nitin and Ravi is 3 : 2. If the sum of ages of Rahul and Nitin was 47 five years before, find the age of Rahul at present.

A.39 years B. 35 years C. 37 years D. 36 years E. 38 years

4. There are three members in a family – husband, wife and their son. Husband's age is thrice his son's age and wife is three years younger than his husband. What is the respective ratio of ages of son, husband and wife if their average age is 41?

A. 17 : 9 : 18 B. 15 : 4 : 12 C. 6 : 18 : 17 D. 4 : 12 : 15 E. None of these

5. The respective ratio of the present age of grandfather, father, mother and son is 25 : 14 : 11 : 6. Before 9 years, the ratio of the age of Grandfather and son was 13 : 3 respectively. What will be the average of the age of father and mother after 9 years?

A. 75 years B. 350 years C. 375 years D. 384 years E. None of these

6. A is 8 years older to B but 11 years younger to C. When the average age of all of them was 26 years, D was born. When D became 16 years old, C died, then what was the average age of the remaining three persons?

A. 30 years 4 months B. 30 years C. 29 years 8 months D. 32 years E. None of these

7. **Present average of age of A and B is 6x – 15 years. Present average age of A, B and C is 4x + 6 years. If present age of B is 25% less than the present age of C and 20% more than the present age of A, then find the present age of A.**

A. 30 years B. 33 years C. 36 years D. 39 years E. Can't be determined

8. **The age of Arjun is (x + 5) years. The ratio of the age of Arjun 2 years hence to the age of Draupadi 1 year before is 6 : 5 respectively. If Arjun is 4 years older than Draupadi, then find the age of Shubhadra whose age is 4 years less than the average age of Arjun and Draupadi taken together.**

A. 30 years B. 36 years C. 34 years D. 32 years E. None of these

9. **Arun and Meena recently celebrated their golden anniversary and their daughter Seema's birthday. If the age of Seema 18 years after her parents' marriage and her age at their golden anniversary is in the ratio 5 : 21, how many years after the marriage was Seema born?**

A. 8 years B. 15 years C. 12 years D. 10 years E. None of these

10. **Seven years later from now A will be as old as B was 4 years ago. C was born 2 years ago. The average age of A, B and C 10 years later will be 33yrs. What is the present age of A?**

A. 30 years B. 28 years C.31 years D. 29 years E. None of these

11. **P's age 8 years ago is equal to the sum of the present ages of his son and his daughter. 5 years hence, the ratio between his daughter's age and his son's age will be 7 : 6 respectively. P's wife is 7 years elder than him. His wife's present age is thrice the present age of his son. What is his daughter's present age?**

A. 18 years B. 20 years C. 23 years D. 28 years E. None of these

12. **The present average age of a group of 60 athletes is 50% more than the average age of the 60 athletes 5 years ago. The average age of the group will become Y, if two new athletes of 22 year and 38 years join the group. Find the value of Y.**

A. 14.44 B. 17.54 C. 15.48 D. 16 E. None of these

13. **The ratio between the present ages of Amon and Chan is 3 : 4. The ratio of Bevan's age after 5 years to Chan's age 1 year ago is 4 : 3 and four times the difference in ages of Chan and Amon is one more than the age of Bevan. Find the average of the present ages of Amon and Chan.**

A. 20 years B. 10 years C. 14 years D. 15 years E. None of these

14. **Present age of son and mother are in ratio 3 : 8. Four years ago ratio of daughters age to Mothers age was 1 : 9. When the son was born the ratio of age of mother and father was 5:6. If the present age of daughter is 8 years, find the average age of family just before the daughter is born.**

A. 28 years B. 30 years C. 25.33 years D. 27.67 years E. 22.33 years

15. **10 years ago, Elephant was five times older than Giraffe . Five years from now, the age of Elephant will be twice the age of the Giraffe. What was the ratio of the age of Elephant and Giraffe five years ago?**

A. 5 : 1 B. 3 : 1 C. 1 : 4 D. 2 : 5 E. 3 : 7

16. **Gautam's present age is equal to 20% of his father's age 15 years ago and Gaurav's present age(brother of Gautam), is 60% of his father's age ten years ago. If the sum of Gautam's present age and Gaurav 's present age is 31, then find their fathers present age?**

A. 45 years B. 50 years C. 35 years D. 40 years E. None of these

17. **Ratio of present age of Amit's father and Amit's mother is 20 : 17. Amit was born when the ratio of his father's age and mother's age was 10 : 7. Find the ratio of Amit's present age and his mother's age after 9 years if Amit's present age lies between 25 and 35. (Given that Age of all the members are Integers.)**

A. 1 : 2 B. 2 : 3 C. 3 : 4 D. 2 : 5 E. 1 : 3

18. **Sum of age of Pert and Qui is 10 more than twice the age of Rachee and sum of ages Pert and Sam is 5 more than twice the age of Rachee. If the average age of Qui and Sam is 25.5 years and average of all four is 27 years, find the age difference between Rachee and Pert.**

A. 3 years B. 9 years C. 5 years D. 7 years E. 11 years

19. **If x years ago, Sachin's age was four times to the age of his daughter, and x years hence, Sachin's age will be twice the age of his daughter, find the ratio of the present ages of Sachin and his daughter.**

A. 7 : 5 B. 5 : 1 C. 5 : 2 D. 5 : 3 E. 7 : 3

20. **19 years ago, the average age of a woman and her daughter was 47.5 years. At present, two times of the woman's age is equal to five times of the daughter's age. 19 years hence, what will be the age of daughter?**

A. 38 years B. 34 years C. 57 years D. 51 years E. None of these

21. **10 years ago, respective ratio of the age of mother and daughter was 4 : 1. 10 years hence, the respective ratio of the age of mother and daughter will become 2 : 1. At present, what is the sum of their age?**

A. 80 years B. 90 years C. 50 years D. 70 years E. None of these

22. **The average age of a man's wife, and his twin daughters is 45 years. The ratio of the age of wife and a daughter is 5 : 1. What is the age of father?**

A. 112.5 years B. 120 years C. 125 years D. 80 years E. Can't be determined

23. **At present, the ratio of the age of A to B is 4 : 5. Five years ago, the ratio of the age of B to C was 3 : 2. Five years hence, the age of C become 30 years , then at present what is the age of A?**

A. 24 years B. 28 years C. 32 years D. 36 years E. None of these

24. **X years ago, Rohini's age was one fourth of the age of her father. X years hence, Rohini's age will become half of the age of her father. At present, Rohini's age is what percent of her father's age?**

A. 33.33% B. 30% C. 60% D. 50% E. None of these

25. **The average age of a family of 5 members was 32 years. 3 years later, the oldest member of the family died at the age of 60. On the same day, a child was born in the family. What would be the average age of the family 20 years after the death of the oldest member?**

A. 52 years B. 43 years C. 47 years D. 50 years E. 55 years

26. **A father stated, "thrice my father's age is 7 times my age. And my son's age is cube root of my age. Also, nine years ago, my age was one-third of my father's age then." Find the ratio between the age of the father's father, the father's son and the father himself is**

A. 21 : 2 : 3 B. 14 : 2 : 9 C. 7 : 1 : 3 D. 21 : 1 : 9 E. None of these

27. **Radha's present age is $1/6^{th}$ of her mother's age. Radha's mother's age will be thrice of Mohan's age after 12 years. If Mohan's 8^{th} birthday was celebrated 4 years ago, then what is the Radha's mother's present age ?**

A. 54 years B. 60 years C. 10 years D. 36 years E. None of these

28. **The present average age of four friends A, B, C and D is 40.5 years. Age of A after two years will be 50% of the age of D 6 years hence. Present ages of A and B are in the ratio of 4 : 5 respectively. Present ages of C and D are in the ratio of 5 : 6 respectively. Find the present average age of B and C.**

A. 40 years B. 34 years C. 28 years D. 52 years E. None of these

29. **Present average age of Kavita and Sonika is 'x' years. Ratio of the age of Kavita one year ago to the age of Mona four years hence will be 1 : 2. Present average age of Kavita, Mona and Sonika is 22 years. Find the value of 'x' if the present age of Kavita is 16 years.**

A. 28 B. 26 C. 24 D. 20 E. 16

30. **The average age of the hostel boys increases by 10% when the ages of a warden and a new boy are added, while it remains the same when only the age of the boy is added. If the age of the new boy is 'x' and the warden's age is (2x + 8) and there were 15 boys initially, then find the initial average age of the hostel.**

A. 20.42 B. 11.42 C. 16.42 D. 15.42 E. None of these

31. **The average present age of three members of a family is 50 years. After 3 years, son got married and average age of the family became 47 years, then find the age of the son's wife at the time of marriage.**

A. 25 years B. 27 years C. 29 years D. 31 years E. 33 years

32. **The present ages of P and Q are in the ratio 3 : 4 respectively. The ages of R and Q, 4 years hence would be in the ratio of 5 : 4 respectively. S's present age is ___ and he is 8 years elder to R. The average of present ages of P, Q, R and S is 28 years.**

A. 34 years B. 35 years C. 36 years D. 39 years E. None of these

33. **The average age of four friends Sanju, Manju, Tanjul and Raju is 34 years. The ratio of age of Sanju 4 years from now and the present age of Manju is 3 : 2 respectively. The ratio of present age of Tanjul and present age of Raju is 2 : 3 respectively. Find the present age of Sanju if it is known that Raju is 8 years younger than Sanju.**

A. 24 years B. 32 years C. 36 years D. 44 years E. 48 years

34. **The average age of the employees of an office, having 'y' employees was 48 years. Two employees aged 53 and x respectively, resigned from office. So a new employee joins the office aged 34. Next year in the same month the average age of the 9 employees was found to be 46 years. If there were 10 employees initially, then find the value of x.**

A. 56 B. 53 C. 57 D. 61 E. None of these

35. **The respective ratio of age of Govind four years before to the age of Shankar 4 years after is 1 : 2, and ratio of present age of Govind to the present age of Bhanumati is 4 : 3. If the average present age of Shankar and Bhanumati is 27 years, then find the present age of Bhanumati.**

A. 18 years B. 24 years C. 30 years D. 36 years E. 12 years

36. **The present ages of Radha and Ram are in the ratio 4 : 5. After 'y' years the ratio of their ages becomes 9 : 11 and (y + 2) years ago the ratio of their ages was 13 : 17. Find the sum of their ages after 'y' years.**

A. 76 years B. 80 years C. 84 years D. 88 years E. None of these

37. **The age of Monu was six - fifth of his wife Monika's age at the time of marriage. When Monika was born his Father Mohan was 32 years old and at the time of Monika's marriage he was three times of her age. At present Mohan is 85 years old, then what is the present average age of Monu and his wife Monika?**

A. 52.4 years B. 54.6 years C. 58.8 years D. 48.6 years E. None of these

38. **The age of three friends Doraemon, Nobita and Shizuka is (x + 3) years, (y – 2) years, and (y – x + 17) years respectively. If the ratio of age of Doraemon to Nobita is 9 : 8 respectively, and the ratio of age of Nobita to Shizuka is 4 : 5 respectively, then find the average age of three friends.**

A. 16 years B. 18 years C. 20 years D. 24 years E. None of these

39. **There are four friends A, B, C and D. Five years ago the ages of A and B was in the ratio of 5: 8 respectively. 10 years hence, the ages of C and D will be in the ratio 9: 10 respectively. Present age of A is 25% less than the present age of D. Find the difference between the ages of B and C if the average present age of A, B, C and D is 37 years 6 months.**

A. 5 years B. 8 years C. 10 years D. 12 years E. None of these

40. **There are three members in a family, Karan, his son Ajay and Ajay's wife Kajal. At the time of Ajay's wedding, the average of the age of these three was 38 yrs. After some time Karan died and at the same time, Ajay's daughter Kalpana was born. The average age of Ajay, Kajal and Kalpana 10 years after their wedding is 25. If the age of Karan at the time of wedding of Ajay was 62yrs, at what age did he die?**

A. 71 years B. 67 years C. 69 years D. 73 years E. None of these

41. **A family of five people has average age equal to 50 yrs in 2011. In 2016 the eldest person in the family died and at the same time a new baby was born. Later, in 2020 the average age of the family is 45 yrs. What would have been the age of the eldest person of the family in 2020, had he been alive?**

A. 74 years B. 72 years C. 68 years D. 75 years E. None of these

42. **At present, the respective ratio of the sum and the difference of the age of son and grandfather is 5: 4. Five years later, the respective ratio of the age of son and grandfather becomes 1 : 5. What is the difference between the age of grandfather and that of son?**

A. 50 years B. 45 years C. 42 years D. 48 years E. None of these

43. **Ratio of age of Ram to Shyam is 5 : 3 and that of Ram to Radha is 2 : 3. Difference in ages of Radha and Shyam is 27 years. Find the average of their present ages.**

A. 34 years B. 33 years C. 32 years D. 31 years E. None of these

44. **At present, the sum of the ages of A, B and C is 150 years, whereas 10 years ago, the ratio of their age was 5 : 4 : 3. Find the ratio of their ages 10 years hence.**

A. 7 : 5 : 3 B. 7 : 6 : 5 C. 4 : 3 : 5 D. 6 : 9 : 5 E. None of these

45. **8 years ago, the ratio of A's age and B's age was 13 : 5. Six years hence, the ratio of A's age and B's age would be 33 : 17. At present, what is the ratio of the sum of their ages to the difference of their ages?**

A. 15 : 7 B. 11 : 4 C. 5 : 3 D. 4 : 1 E. None of these

46. **The average age of Zaheer and Nehra is 50% of the average age of Bala Ji, Srisanth and Harbhajan. The average age of Bala Ji and Srisanth is 35 years. If Harbhajan replaces Bala Ji, the average age becomes 32 years and if Harbhajan replaces Srisanth, then the average age becomes 38 years. Find the average age of all the five players.**

A. 27 years B. 28 years C. 35 years D. 39 years E. None of these

47. **The ratio of the age of Sonny and Aarav is 4 : 5. Punit is 5 years elder than Aarav and 8 years elder than Sonny. Find the sum of the ages of all the 3 people after 5 years from now?**

A. 60 years B. 62 years C. 58 years D. 65 years E. 64 years

48. **Ratio of age of Aishwarya 5 years ago and the age of Abhishek 7 years hence is 3 : 4. Twice the present age of Aishwarya is twice the age of Abhishek two years hence. Find the present age of Aishwarya**

A. 33 years B. 31 years C. 34 years D. 42 years E. 35 years

49. **Rahul is 8 years older than Manish while Manish is 6 years older than Sonu. If the ratio of the age of Sonu to the age of Rahul is 5: 12, then what will be the age of Manish after 12 years?**

A. 26 years B. 24 years C. 28 years D. 27 years E. 30 years

50. **At present, the ratio of A's to B's age is 4 : 5. 10 years before, the ratio was 19 : 25. If C is 12 years older than A , then at present what is the average of the age (in years) of A, B and C together?**

A. 56 B. 54 C. 48 D. 44 E. None of these

1. राजीव की वर्तमान आयु उसके पिता की आयु की 100/3% है और उसके पिता की आयु उसके दादाजी की आयु की आधी है | उन तीनो की औसत वर्तमान आयु 110/3 वर्ष है | 10 वर्ष पहले उनकी आयु का अनुपात क्या था ?

A. 1 : 43 : 56 B. 1 : 23 : 56 C. 1 : 23 : 46 D. 1 : 26 : 56 E. इनमे से कोई नहीं

2. अर्जुन भुवन से, जिसकी आयु 12 वर्ष है 2 वर्ष छोटा है| जब शंजू की आयु में से 10 वर्ष घटा दिए जाते हैं और परिणाम को 6 से भाग दिया जाता है तो उसके पोते अर्जुन की वर्तमान आयु प्राप्त हो जाती है| तो अर्जुन, भुवन और शंजू की आयु का अनुपात बताइए|

A. 5 : 6 : 35 B. 7 : 2 : 23 C. 7 : 2 : 35 D. 5 : 6 : 23 E. इनमे से कोई नहीं

3. राहुल और रवि की वर्तमान आयु का योग नितिन और निशांत की अब से 10 वर्ष पूर्व की आयु के योग के बराबर है| रवि निशांत से 5 वर्ष बड़ा है | नितिन और रवि की आयु का अनुपात 3:2 है| यदि 5 वर्ष पहले राहुल और नितिन की आयु का योग 47 था तो राहुल की वर्तमान आयु बताइए|

A. 39 वर्ष B.35 वर्ष C. 37 वर्ष D. 36 वर्ष E. 38 वर्ष

4. एक परिवार में तीन सदस्य हैं- पति, पत्नि और उनका बेटा| पति की आयु उसके बेटे की आयु की तिगुनी है और पत्नि अपने पति से तीन साल छोटी है| यदि उनकी औसत आयु 41 हो तो क्रमश: बेटे, पति तथा पत्नि की आयु का अनुपात क्या होगा?

A. 17 : 9 : 18 B. 15 : 4 : 12 C. 6 : 18 : 17 D. 4 : 12 : 15 E. इनमे से कोई नहीं

5. दादाजी,पिताजी, माताजी और पुत्र की वर्तमान आयु का अनुपात क्रमश: 25 : 14 : 11 : 6 है | 9 वर्ष पहले, दादाजी और पुत्र की आयु का अनुपात क्रमश:13 : 3 था| 9 वर्ष बाद पिताजी और माताजी की औसत आयु क्या होगी?

A. 75 वर्ष B. 350 वर्ष C. 375 वर्ष D. 384 वर्ष E. इनमे से कोई नहीं

6. A, B से 8 वर्ष बड़ा है लेकिन C से 11 वर्ष छोटा है। जब सभी की औसत आयु 26 वर्ष थी, तब D का जन्म हुआ था। जब D 16 साल का हो गया, C की मृत्यु हो गई, तो शेष तीन व्यक्तियों की औसत आयु क्या थी?

A. 30 वर्ष 4 महीने B. 30 वर्ष C. 29 वर्ष 8 महीने D. 32 वर्ष E. इनमें से कोई नहीं

7. A और B की वर्तमान आयु का औसत 6x - 15 वर्ष है। A, B और C की वर्तमान औसत आयु 4x + 6 वर्ष है। यदि B की वर्तमान आयु C की वर्तमान आयु से 25% कम है और A की वर्तमान आयु से 20% अधिक है, तो A की वर्तमान आयु ज्ञात कीजिए।

A. 30 वर्ष B. 33 वर्ष C. 36 वर्ष D. 39 वर्ष
E. निर्धारित नहीं किया जा सकता

8. अर्जुन की आयु (x + 5) वर्ष है। अर्जुन की 2 वर्ष बाद की आयु द्रौपदी की 1 वर्ष से पहले की आयु का अनुपात क्रमशः 6: 5 है। यदि अर्जुन द्रौपदी से 4 वर्ष बड़ा है, तो शुभद्रा की आयु ज्ञात करें, जिसकी आयु अर्जुन और द्रौपदी की औसत आयु से 4 वर्ष कम है।

A. 30 वर्ष B. 36 वर्ष C. 34 वर्ष D. 32 वर्ष E. इनमें से कोई नहीं

9. अरुण और मीना ने हाल ही में अपनी स्वर्ण वर्षगांठ और अपनी बेटी सीमा का जन्मदिन मनाया। यदि माता-पिता के विवाह के 18 वर्ष बाद सीमा की आयु और उनकी स्वर्ण वर्षगांठ पर उसकी आयु 5: 21 के अनुपात में है, तो विवाह के कितने वर्ष बाद सीमा का जन्म हुआ था?

A. 8 वर्ष B. 15 वर्ष C. 12 वर्ष D. 10 वर्ष E. इनमें से कोई नहीं

10. अब से सात साल बाद A उतना ही बड़ा होगा जितना B 4 साल पहले था। C का जन्म 2 साल पहले हुआ था। A, B और C की औसत आयु 10 वर्ष बाद 33 वर्ष होगी। A की वर्तमान आयु क्या है?

A. 30 वर्ष B. 28 वर्ष C. 31 वर्ष D. 29 वर्ष E. इनमें से कोई नहीं

11. P की आयु 8 वर्ष पहले उसके पुत्र और उसकी पुत्री की वर्तमान आयु के योग के बराबर है। 5 साल बाद, उनकी बेटी की उम्र और उनके बेटे की उम्र के बीच का अनुपात क्रमशः 7: 6 होगा। P की पत्नी उनसे 7 साल बड़ी है। उनकी पत्नी की वर्तमान आयु उनके पुत्र की वर्तमान आयु की तीन गुनी है। उनकी बेटी की वर्तमान आयु क्या है?

A. 18 वर्ष B. 20 वर्ष C. 23 वर्ष D. 28 वर्ष E. इनमें से कोई नहीं

12. 60 एथलीटों के समूह की वर्तमान औसत आयु 5 वर्ष पहले के 60 एथलीटों की औसत आयु से 50% अधिक है। समूह की औसत आयु Y हो जाएगी, यदि 22 वर्ष और 38 वर्ष के दो नए एथलीट समूह में शामिल हो जाते हैं। Y का मान ज्ञात कीजिए।

A. 14.44 B. 17.54 C. 15.48 D. 16 E. इनमें से कोई नहीं

13. अमोन और चान की वर्तमान आयु के बीच का अनुपात 3: 4 है। 5 साल बाद बेवन की आयु और 1 साल पहले चान की आयु का अनुपात 4: 3 है और चैन और ऐमोन की आयु के अंतर का चार गुना बेवन की आयु से एक अधिक है। अमोन और चान की वर्तमान आयु का औसत ज्ञात करें।

A. 20 वर्ष B. 10 वर्ष C. 14 वर्ष D. 15 वर्ष E. इनमें से कोई नहीं

14. बेटे और माँ की वर्तमान आयु 3: 8 के अनुपात में है। चार साल पहले बेटी और माँ की उम्र का अनुपात 1: 9 था। जब बेटे का जन्म हुआ तो माँ और पिता की आयु का अनुपात 5: 6 था। यदि बेटी की वर्तमान आयु 8 वर्ष है, तो बेटी के जन्म से ठीक पहले परिवार की औसत आयु ज्ञात करें।

A. 28 वर्ष B. 30 वर्ष C. 25.33 वर्ष D. 27.67 वर्ष E. 22.33 वर्ष

15. 10 साल पहले, हाथी जिराफ से पांच गुना बड़ा था। अब से पांच साल बाद, हाथी की उम्र जिराफ की उम्र से दोगुनी होगी। पांच साल पहले हाथी और जिराफ की आयु का अनुपात क्या था?

A. 5 : 1 B. 3 : 1 C. 1 : 4 D. 2 : 5 E. 3 : 7

16. गौतम की वर्तमान आयु 15 साल पहले उनके पिता की आयु के 20% के बराबर है और गौरव की वर्तमान आयु (गौतम का भाई), उनके पिता की दस साल पहले की आयु का 60% है। यदि गौतम की वर्तमान आयु और गौरव की वर्तमान आयु का योग 31 है, तो उनके पिता की वर्तमान आयु ज्ञात करें?

A. 45 वर्ष B. 50 वर्ष C. 35 वर्ष D. 40 वर्ष E. इनमें से कोई नहीं

17. अमित के पिता और अमित की माता की वर्तमान आयु का अनुपात 20: 17 है। अमित का जन्म तब हुआ था जब उनके पिता की आयु और माता की आयु का अनुपात 10: 7 था। अमित की वर्तमान आयु और 9 वर्ष के बाद उनकी माँ की आयु का अनुपात ज्ञात करें यदि अमित की वर्तमान आयु 25 से 35 के बीच है। (यह देखते हुए कि सभी सदस्यों की आयु पूर्णांक है।)

A. 1 : 2 B. 2 : 3 C. 3 : 4 D. 2 : 5 E. 1 : 3

18. पर्ट और क्वी की आयु का योग राचे की आयु के दोगुने से 10 अधिक है और पर्ट और सैम की आयु राचे की आयु से दोगुने से 5 अधिक है। यदि क्वी और सैम की औसत आयु 25.5 वर्ष है और सभी चार का औसत 27 वर्ष है, तो राचे और पर्ट के बीच आयु का अंतर ज्ञात करें।

A. 3 वर्ष B. 9 वर्ष C. 5 वर्ष D. 7 वर्ष E. 11 वर्ष

19. अगर x साल पहले, सचिन की उम्र उनकी बेटी की उम्र की चार गुनी थी, और x साल बाद, सचिन की उम्र उनकी बेटी की उम्र की दोगुनी होगी, सचिन और उनकी बेटी की वर्तमान उम्र का अनुपात ज्ञात करें।

A. 7 : 5 B. 5 : 1 C. 5 : 2 D. 5 : 3 E. 7 : 3

20. 19 साल पहले, एक महिला और उसकी बेटी की औसत उम्र 47.5 साल थी। वर्तमान में, महिला की उम्र का दुगना बेटी की उम्र के पांच गुने के बराबर है। 19 साल बाद बेटी की उम्र क्या होगी ?

A. 38 साल B. 34 साल C. 57 साल D. 51 साल E. इनमें से कोई नहीं

21. 10 साल पहले, मां और बेटी की आयु का संबंधित अनुपात 4: 1 था। 10 साल बाद मां और बेटी की आयु का संबंधित अनुपात 2: 1 हो जाएगा। वर्तमान में, उनकी आयु का योग क्या है ?

A. 80 साल B. 90 साल C. 50 साल D. 70 साल E. इनमें से कोई नहीं

22. एक आदमी की पत्नी, और उसकी जुड़वां बेटियों की औसत उम्र 45 साल हैं। पत्नी और एक बेटी की उम्र का अनुपात 5 : 1 है। पिता की उम्र क्या है?

A. 112.5 साल B. 120 साल C. 125 साल D. 80 साल
E. निर्धारित नहीं किया जा सकता।

23. वर्तमान में, A और B की आयु का अनुपात 4 : 5 है। पांच साल पहले, B और C की उम्र का अनुपात 3 : 2 था। पांच साल बाद, C की उम्र 30 साल हो गई, तो वर्तमान में A की उम्र क्या है?

A. 24 वर्ष B. 28 वर्ष C. 32 वर्ष D. 36 वर्ष E. इनमें से कोई नहीं

24. x साल पहले, रोहिणी की उम्र उसके पिता की उम्र का एक चौथाई थी। x साल बाद, रोहिणी की उम्र उसके पिता की उम्र का आधा हो जाएगी। वर्तमान में, रोहिणी की उम्र उसके पिता की उम्र का कितना प्रतिशत है?

A. 33.33% B. 30% C. 60% D. 50% E. इनमें से कोई नहीं

25. 5 सदस्यों वाले परिवार की औसत आयु 32 वर्ष थी। 3 साल बाद, परिवार के सबसे बड़े सदस्य का 60 वर्ष की आयु में निधन हो गया। उसी दिन परिवार में एक बच्चे का जन्म हुआ। सबसे बड़े सदस्य की मृत्यु के 20 साल बाद परिवार की औसत आयु क्या होगी?

A. 52 वर्ष B. 43 वर्ष C. 47 वर्ष D. 50 वर्ष E. 55 वर्ष

26. एक पिता ने कहा, "मेरे पिता की आयु का तीन गुना मेरी आयु का 7 गुना है। और मेरे बेटे की उम्र मेरी उम्र का घनमूल है। और, नौ साल पहले, मेरी उम्र मेरे पिता की उम्र का एक तिहाई थी। "पिता के पिता, पिता के पुत्र और स्वयं पिता की आयु का अनुपात ज्ञात करें|

A. 21 : 2 : 3 B. 14 : 2 : 9 C. 7 : 1 : 3 D. 21 : 1 : 9 E. इनमें से कोई नहीं

27. राधा की वर्तमान आयु उनकी माँ की आयु की 1/6 है। राधा की माँ की आयु 12 साल बाद मोहन की आयु की तीन गुनी होगी। अगर मोहन का 8 वां जन्मदिन 4 साल पहले मनाया गया था, तो राधा की माँ की वर्तमान आयु क्या है?

A. 54 वर्ष B. 60 वर्ष C. 10 वर्ष D. 36 वर्ष E. इनमें से कोई नहीं

28. चार दोस्तों A, B, C और D की वर्तमान औसत आयु 40.5 वर्ष है। दो साल बाद A की आयु 6 वर्ष बाद D की आयु का 50% होगी। A और B की वर्तमान आयु क्रमशः 4 : 5 के अनुपात में है। C और D की वर्तमान आयु क्रमशः 5 : 6 के अनुपात में है। B और C की वर्तमान औसत आयु ज्ञात कीजिए।

A. 40 वर्ष B. 34 वर्ष C. 28 वर्ष D. 52 वर्ष E. इनमें से कोई नहीं

29. कविता और सोनिका की वर्तमान औसत आयु 'x' वर्ष है। एक वर्ष पहले मोना की आयु और चार वर्ष बाद कविता की आयु का अनुपात 1 : 2 होगा। कविता, मोना और सोनिका की वर्तमान औसत आयु 22 वर्ष है। यदि कविता की वर्तमान आयु 16 वर्ष है, तो 'x' का मान ज्ञात कीजिए।

A. 28 B. 26 C. 24 D. 20 E. 16

30. हॉस्टल के लड़कों की औसत उम्र 10% बढ़ जाती है जब एक वार्डन और एक नए लड़के की उम्र को जोड़ दिया जाता है, जबकि यह समान बना रहता है जब केवल लड़के की उम्र को जोड़ा जाता है। अगर नए लड़के की उम्र 'x' है और वार्डन की उम्र (2x + 8) है और शुरू में 15 लड़के थे, तो होस्टल की शुरुआती औसत उम्र का पता लगाएं।

A. 20.42 B. 11.42 C. 16.42 D. 15.42 E. इनमें से कोई नहीं

31. एक परिवार के तीन सदस्यों की औसत वर्तमान आयु 50 वर्ष है। 3 साल बाद, बेटे की शादी हो गई और परिवार की औसत आयु 47 साल हो गई, तो शादी के समय बेटे की पत्नी की उम्र का पता लगाएं।

A. 25 वर्ष B. 27 वर्ष C. 29 वर्ष D. 31 वर्ष E. 33 वर्ष

32. P और Q की वर्तमान आयु क्रमशः 3 : 4 के अनुपात में है। R और Q की आयु, 4 वर्ष बाद क्रमशः 5 : 4 के अनुपात में होगी। S की वर्तमान आयु ___ है और वह R से 8 वर्ष बड़ा है। P, Q, R और S की वर्तमान आयु का औसत 28 वर्ष है।

A. 34 वर्ष B. 35 वर्ष C. 36 वर्ष D. 39 वर्ष E. इनमें से कोई नहीं

33. चार दोस्तों संजू, मंजू, तंजुल और राजू की औसत उम्र 34 वर्ष है। अब से 4 वर्ष बाद संजू की आयु और मंजू की वर्तमान आयु का अनुपात क्रमशः 3 : 2 है। तंजुल की वर्तमान आयु और राजू की वर्तमान आयु का अनुपात क्रमशः 2 : 3 है। संजू की वर्तमान आयु ज्ञात करें यदि यह ज्ञात हो कि राजू संजू से 8 वर्ष छोटा है।

A. 24 वर्ष B. 32 वर्ष C. 36 वर्ष D. 44 वर्ष E. 48 वर्ष

34. किसी कार्यालय के कर्मचारियों की औसत आयु, जिसमें कर्मचारियों की संख्या 'y' है 48 वर्ष थी। क्रमशः 53 और x आयु के दो कर्मचारियों ने पद से इस्तीफा दे दिया। तो 34 वर्ष की आयु का एक नया कर्मचारी कार्यालय में शामिल हो जाता है। अगले साल उसी महीने में 9 कर्मचारियों की औसत आयु 46 वर्ष पाई गई। यदि प्रारंभ में 10 कर्मचारी थे, तो x का मान ज्ञात कीजिए।

A. 56 B. 53 C. 57 D. 61 E. इनमें से कोई नहीं

35. चार साल पहले गोविंद की आयु और 4 साल बाद शंकर की आयु का संबंधित अनुपात 1 : 2 है, और गोविंद की वर्तमान आयु और भानुमति की वर्तमान आयु का अनुपात 4 : 3 है। यदि शंकर और भानुमति की औसत वर्तमान आयु 27 वर्ष है, तो भानुमति की वर्तमान आयु ज्ञात करें।

A. 18 वर्ष B. 24 वर्ष C. 30 वर्ष D. 36 वर्ष E. 12 वर्ष

36. राधा और राम की वर्तमान आयु 4 : 5 के अनुपात में है। 'y' वर्षों के बाद उनकी आयु का अनुपात 9 : 11 हो जाता है और (y + 2) वर्षों पहले उनकी आयु का अनुपात 13 : 17 था। 'Y' वर्षों के बाद उनकी आयु का योग ज्ञात कीजिए।

A. 76 वर्ष B. 80 वर्ष C. 84 वर्ष D. 88 वर्ष E. इनमें से कोई नहीं

37. शादी के समय मोनू की उम्र उसकी पत्नी मोनिका की उम्र की 6/5 थी। जब मोनिका का जन्म हुआ तब उसके पिता मोहन 32 वर्ष के थे और मोनिका की शादी के समय उसके पिता की उम्र उसकी उम्र का तीन गुना थी। वर्तमान में मोहन 85 वर्ष का है, तो मोनू और उनकी पत्नी मोनिका की वर्तमान औसत आयु क्या है?

A. 52.4 वर्ष B. 54.6 वर्ष C. 58.8 वर्ष D. 48.6 वर्ष E. इनमें से कोई नहीं

38. तीन दोस्तों डोरेमोन, नोबिता और शिज़ुका की उम्र क्रमशः (x + 3) वर्ष, (y - 2) वर्ष और (y - x + 17) वर्ष है। यदि डोरेमोन से नोबिता की आयु का अनुपात क्रमशः 9: 8 है, और नोबिता और शिज़ुका की आयु का अनुपात क्रमशः 4: 5 है, तो तीन दोस्तों की औसत आयु ज्ञात करें।

A. 16 वर्ष B. 18 वर्ष C. 20 वर्ष D. 24 वर्ष E. इनमें से कोई नहीं

39. चार दोस्त A, B, C और D हैं। पांच साल पहले A और B की उम्र क्रमशः 5: 8 के अनुपात में थी। 10 साल बाद, C और D की आयु क्रमशः 9: 10 के अनुपात में होगी। A की वर्तमान आयु, D की वर्तमान आयु से 25% कम है, B और C के बीच का अंतर ज्ञात करें यदि A, B, C और D की औसत वर्तमान आयु 37 वर्ष 6 माह है।

A. 5 वर्ष B. 8 वर्ष C. 10 वर्ष D. 12 वर्ष E. इनमें से कोई नहीं

40. एक परिवार में तीन सदस्य हैं, करन, उनका बेटा अजय और अजय की पत्नी काजल। अजय की शादी के समय, इन तीनों की उम्र का औसत 38 वर्ष था। कुछ समय बाद करन की मृत्यु हो गई और उसी समय, अजय की बेटी कल्पना का जन्म हुआ। उनकी शादी के 10 साल बाद अजय, काजल और कल्पना की औसत उम्र 25 है। अगर अजय की शादी के समय करन की उम्र 62 साल थी, तो उनकी मृत्यु किस उम्र में हुई?

A. 71 वर्ष B. 67 वर्ष C. 69 वर्ष D. 73 वर्ष E. इनमें से कोई नहीं

41. 2011 में पांच लोगों के परिवार की औसत आयु 50 वर्ष के बराबर है। 2016 में परिवार के सबसे बड़े व्यक्ति की मृत्यु हो गई और उसी समय एक बच्चे का जन्म हुआ। बाद में, 2020 में परिवार की औसत आयु 45 वर्ष है। 2020 में परिवार के सबसे बड़े व्यक्ति की उम्र क्या रही होगी, क्या वह जीवित था?

A. 74 वर्ष B. 72 वर्ष C. 68 वर्ष D. 75 वर्ष E. इनमें से कोई नहीं

42. वर्तमान में, पुत्र और दादाजी की आयु के योग तथा अंतर का अनुपात 5: 4. है। पांच साल बाद, पुत्र और दादा की आयु का अनुपात 1: 5 हो जाता है। तो दादाजी और पुत्र की आयु में अंतर ज्ञात करेा?

A. 50 साल B. 45 साल C. 42 साल D. 48 साल E. इनमें से कोई नहीं

43. श्याम और राम की आयु का अनुपात 5: 3 है, राम और राधा की आयु का अनुपात 2: 3 है और राधा और श्याम की उम्र का अंतर 27 वर्ष है तो तीनों के वर्तमान आयु का औसत निकालें ।

A. 34 वर्ष B. 33 वर्ष C. 32 वर्ष D. 31 वर्ष E. इनमे से कोई नहीं

44. वर्तमान में, A , B और C की आयु का योग 150 वर्ष है, जबकि 10 साल पहले, उनकी उम्र का अनुपात 5: 4: 3. था । 10 बाद उनकी उम्र का अनुपात ज्ञात कीजिये।

A. 7 : 5 : 3 B. 7 : 6 : 5 C. 4 : 3 : 5 D. 6 : 9 : 5 E. इनमें से कोई नहीं

45. 8 साल पहले, A की आयु और B की आयु का अनुपात 13 : 5 था। छह साल बाद, A की आयु और B की आयु का अनुपात 33 : 17 होगा। वर्तमान में, उनकी आयु के योग और उनकी आयु के अंतर का अनुपात क्या है?

A. 15 : 7 B. 11 : 4 C. 5 : 3 D. 4 : 1 E. इनमें से कोई नहीं

46. ज़हीर और नेहरा की औसत आयु बाला जी, श्रीसंत और हरभजन की औसत आयु का 50% है। बाला जी और श्रीसंत की औसत आयु 35 वर्ष है। अगर हरभजन बाला जी की जगह लेता है, तो औसत आयु 32 साल हो जाती है और अगर हरभजन श्रीसंत की जगह लेते हैं, तो औसत आयु 38 साल हो जाती है। सभी पाँच खिलाड़ियों की औसत आयु ज्ञात कीजिए।

A. 27 वर्ष B. 28 वर्ष C. 35 वर्ष D. 39 वर्ष E. इनमें से कोई नहीं

47. सन्नी और आरव की उम्र का अनुपात 4: 5 है। पुनीत आरव से 5 साल बड़ा और सन्नी से 8 साल बड़ा है। अब से 5 वर्ष बाद सभी 3 लोगों की आयु का योग ज्ञात कीजिए?

A. 60 वर्ष B. 62 वर्ष C. 58 वर्ष D. 65 वर्ष E. 64 वर्ष

48. 5 वर्ष पहले ऐश्वर्या की आयु और 7 वर्ष बाद अभिषेक की आयु का अनुपात 3: 4 है। ऐश्वर्या की वर्तमान आयु का दो गुना दो वर्ष बाद अभिषेक की आयु का दोगुना है। ऐश्वर्या की वर्तमान आयु का पता लगाएं

A. 33 वर्ष B. 31 वर्ष C. 34 वर्ष D. 42 वर्ष E. 35 वर्ष

49. राहुल मनीष से 8 साल बड़ा है जबकि मनीष सोनू से 6 साल बड़ा है। अगर सोनू की उम्र और राहुल की उम्र का अनुपात 5: 12 है, तो 12 साल बाद मनीष की उम्र क्या होगी?

A. 26 वर्ष B. 24 वर्ष C. 28 वर्ष D. 27 वर्ष E. 30 वर्ष

50. वर्तमान में, A और B की आयु का अनुपात 4 : 5 है। 10 साल पहले, अनुपात 19 : 25 था। यदि C, A से 12 वर्ष बड़ा है, तो वर्तमान में A, B और C की आयु (वर्षों में) का औसत क्या है?

A. 56 B. 54 C. 48 D. 44 E. इनमें से कोई नहीं

CORRECT ANSWERS:

1	B	**11**	C	**21**	D	**31**	C	**41**	A
2	A	**12**	C	**22**	E	**32**	D	**42**	E
3	D	**13**	C	**23**	B	**33**	D	**43**	D
4	C	**14**	C	**24**	E	**34**	A	**44**	B
5	D	**15**	B	**25**	B	**35**	A	**45**	B
6	B	**16**	B	**26**	D	**36**	B	**46**	B
7	A	**17**	A	**27**	B	**37**	B	**47**	B
8	C	**18**	D	**28**	A	**38**	B	**48**	E
9	A	**19**	C	**29**	D	**39**	C	**49**	C
10	B	**20**	C	**30**	B	**40**	C	**50**	A

Explanations:

1. Let Rajeev's present age = x

His father's present age = 3x

Grandfather's present age = 6x

$\Rightarrow \frac{x + 3x + 6x}{3} = \frac{110}{3}$

$\Rightarrow 10x = 110$

$\Rightarrow x = 11$

Rajeev's present age = 11 years

10 years ago Rajeev's age = 1 year
His father's present age = 33 years

10 years ago = 23 years
His grandfather's present age = 66 years

10 years ago = 56 years

Required ratio = 1: 23: 56

Hence, option B is correct.

2. Bhuvan's age = 12 years

Arjun's age = 12 – 2 = 10 years

Let Shanju's age be 'x' years

Then, according to question-

$\Rightarrow \frac{x - 10}{6} = 10$

$\Rightarrow X - 10 = 60$
$\Rightarrow X = 70$

Required ratio = Arjun: Bhuvan: Shanju $\Rightarrow 10 : 12 : 70 \Rightarrow 5 : 6 : 35$
Hence, option A is correct.'

3. Let, age of Nitin = 3x

Thus, age of Ravi = 2x

And age of Nishant = 2x – 5

Let, age of Rahul = a

Now, according to the question,

a – 5 + 3x – 5 = 47

⇒ a = 57 – 3x

Now,

57 – 3x + 2x = 3x + 10 + 2x – 5 + 10

⇒ 6x = 42
⇒ x = 7

Therefore, age of Rahul, a = 57 – 3 × 7 = 57 – 21 = 36 years

Hence, Option D is correct.

4. Let son's age = x

Husband's age = 3x

Wife's age = 3x – 3

According to question-

⇒ x + 3x + (3x – 3) = 41 × 3

⇒ 7x = 126
⇒ X = 18

Son's age = 18 years

Husband's age = 18 × 3 = 54 years

Wife's age = 18 × 3 – 3 = 51 years

Required ratio = 18 : 54 : 51 = 6 : 18 : 17
Hence, option C is correct.

5. The respective ratio of the present age of grandfather, father, mother and son is 25 : 14 : 11 : 6

The ratio of the present age of grandfather and son = 25 : 6

Let us assume it 25x and 6x

According to the question,

$$\frac{25x - 9}{6x - 9} = \frac{13}{3}$$

By solving, x = 30

The age of father + mother = 14x + 11x = 25x = 25 × 30 = 750

After 9 years, the sum of their age = 750 + 18 = 768 years

Average = $\frac{768}{2}$ = 384 years

Hence, option D is correct.

6. Let the age of B = b years

A's age = (b + 8) years

C's age = (b + 8 + 11) years

When the average age of all was 26 years

b + b + 8 + b + 8 + 11 = 78

3b + 27 = 78

3b = 51

b = 17

When D = 16 years

B = (16 + 17) = 33 years
A = (17 + 8 + 16) = 41 years

The average age of remaining three persons = $\frac{16 + 33 + 41}{3}$ = 30 years

Hence, option B is correct.

7. Sum of the present age of A and B = 2 × (6x – 15) = 12x – 30 years

Sum of the present age of A, B and C = 3 × (4x + 6) = 12x + 18 years

So, the present age of C = 12x + 18 – 12x + 30 = 48 years

Present age of B = 48 × 0.75 = 36 years

Present age of A = $\frac{36}{1.2}$ = 30 years

Hence, option A is correct.

8. Age of Arjun = (x + 5)

Since Arjun is 4 years older than Draupadi , so Age of Draupadi = (x + 1)

According to question,

$\frac{(x + 5) + 2}{(x + 1) - 1} = \frac{6}{5}$

5x + 35 = 6x

x = 35

So, age of Arjun and Draupadi is (35 + 5) = 40 years and (35 + 1) = 36 years respectively

Average age of Arjun and Draupadi = $\frac{40 + 36}{2}$ = 38 years

Therefore, age of Shubhadra = (38 – 4) = 34 years

Hence, option C is correct.

9. Let the age of seema at their silver anniversary = K yrs

18 yrs of marriage = 7 yrs before silver anniversary

Age of seema 7yrs before silver anniversary = K – 7

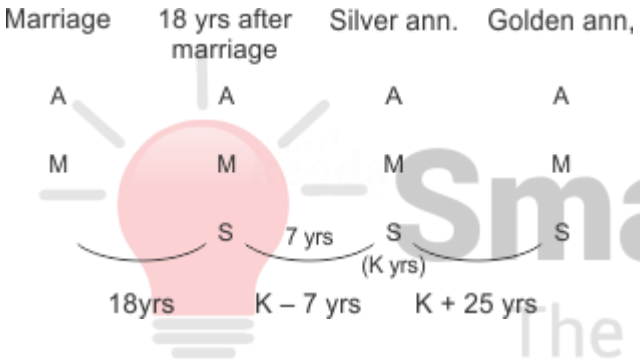
Seema'S age 25 yrs after silver anniversary (golden anniversary) = K + 25

$$\frac{K-7}{K+25} = \frac{5}{21}$$

K = 17yrs

Seema's age on silver anniversary = 17yrs

She is born 25 – 17 yrs = 8yrs after the marriage.



Hence, option A is correct.

Alternate Solution:-

Let the age of Seema 18 years after her parents marriage be 5k years

So age of Seema at golden anniversary of her parents = (5k + 32) years

From the question,

5k / (5k + 32) = 5 / 21

or, k =2

So Seema's age was 10 , when her parents had completed 18 years of marriage.

So Seema was born 8 years after her parents marriage.

Hence, option A is correct.

10. Let age of A 7 years later be k so age of B 4 years ago was k

C was born 2 years ago so age of C 10 yrs later will be 12 years

	4 years ago	Present	7 years later	10 years later
A	k – 11	k – 7	k	K + 3
B	k	K + 4	K + 11	K + 14
C		2	9	12

Average age of all three 10 yrs later = 33

$$\frac{K + 3 + k + 14 + 12}{3} = 33$$

2k + 29 = 99 → 2k = 70 → k = 35

Present age of A = k – 7 = 35 – 7 = 28 years

Hence, option B is correct.

11. Let 5 years hence the age of daughter and son be 7x years and 6x years respectively, then

Present age of daughter= (7x – 5) years

Present age of son = (6x – 5) years

⇒ Present age of P = [(7x – 5) + (6x – 5) + 8] = (13x – 2) years

∴ Present age of P's wife = [(13x – 2) + 7] = (13x + 5) years

Given, present age of P's wife is thrice the present age of his son.

(13x + 5) = 3 (6x – 5)

⇒ x = 4

Hence, his daughter's present age = (7x – 5) = 23 years.

Hence, option C is correct.

12. Let, the present average age of the group = X

Then according to the question,

$$\Rightarrow \frac{150}{100}(X - 5) = X$$

$\Rightarrow X = 15$

The required average 'Y' = $\frac{15 \times 60 + 22 + 38}{62} = 15.48$

Hence, option C is correct.

13. Let Amon's age = A, Bevan's age = B, and Chan's age = C

Then, according to the question,

$\Rightarrow \frac{A}{C} = \frac{3}{4}$ .....(i)

$\Rightarrow \frac{B + 5}{C - 1} = \frac{4}{3}$ .....(iI)

$\Rightarrow 4 \times (C - A) = B + 1$ ----------(iii)

After solving these equations,

$\Rightarrow A = 12$

$\Rightarrow C = 16$

Average of ages of Amon and Chan = $\frac{12 + 16}{2} = 14$

Hence, option C is correct.

14. Present age of daughter = 8 years

Age of Mother and Daughter 4 years back = 36 and 4 respectively

Present age of Mother = 40 years
Present age of Son = 15 years

Age of Father and Mother when son was born(15 years back) = 30 and 25 respectively.

Therefore, present age of father = 45 years

Age of family 8 years ago

Daughter = 0
Son = 7
Mother = 32
Father = 37

Average age = $\frac{7 + 32 + 37}{3}$ = 25.33 years

Hence, option C is correct.

15. Elephant was 5 times older than Giraffe 10 years ago.

Let the age of Giraffe 10 years ago be x years.

∴ The age of Elephant 10 years ago = 5x years

5 years from now, Elephant will be twice older than Giraffe.

∴ We can write now,
(5x + 10 + 5) = 2 × (x + 10 + 5)
⇒ 5x + 15 = 2x + 30
⇒ 3x = 15
⇒ x = 5

∴ Age of Giraffe 10 years ago = 5 years

And, the age of Elephant 10 years ago = 5x = 5 × 5 = 25 years

∴ The reqd. ratio = $\frac{25 + 5}{5 + 5} = \frac{30}{10}$ = 3 : 1

Hence, option B is correct.

16. Let the father's present age be X years

Father's age 15 years ago = (X – 15) years

Gautam's present age = 20% of (X – 15)

$\Rightarrow \frac{(X - 15)}{5}$ years

Gaurav's present = 60% of (X – 10)

$\Rightarrow \frac{3(X - 10)}{5}$ years

$\frac{X - 15}{5} + \frac{3(X - 10)}{5} = 31$

$\Rightarrow x - 15 + 3x - 30 = 155$

$\Rightarrow x = 50$

Hence, option B is correct.

17. Present age of Amit's father = 20x
Present age of Amit's mother 17x
Few Years Ago, ratio of their age was 10 : 7.
Let's say, Y years ago, ratio of their ages was 10 : 7.

$= \frac{20X - Y}{17X - Y} = \frac{10}{7}$

= 140x – 7y = 170x – 10y
30x = 3y
Y = 10X
Y is the present age of Amit which lies between 25 and 35 and it is multiple of 10 as Y = 10X
So the possible value of X = 3
Y = 30
Ratio of their Present Age = 60 : 51 = 20 : 17
Their Ages before 30 years = 30 : 21 = 10 : 7

Therefore, Present Age of Amit = 30 years

Ratio of his present age and his mother's age after 9 years = 30 : 60 = 1 : 2

Hence, option A is correct.

18. P, Q, R and S be the notation used for Pert, Qui, Rachee and Sam.

Average age of P, Q, R and S = 27

∴ P + Q + R + S = 108 ….i

Average of Q and S = 25.5

∴ Q + S = 51……ii

(i – ii)

∴ P + R = 57…..A

According to Question

P + Q = 2R + 10

⇒ P + Q – 5 = 2R + 5…. iii

⇒ P + S = 2R + 5 …iv

From (iii and iv)

Q = S + 5 ……v

From (ii and v)

We can find age of Q = 28 years and S = 23 years

Putting value of S in (IV)

2R – P = 18 ….(vi)

Using (A and vi)

We get R = 25 and P = 32

Difference in age = 7 years

Hence, option D is correct.

19. Let the present age of Sachin and his daughter is S and D respectively.

x years ago, Sachin's age was four times to the age of his daughter.

$$\frac{S - x}{D - x} = \frac{4}{1}$$

$S - x = 4D - 4x$
$4D - S = 3x$ ……..(1)

x years hence, Sachin's age will be twice the age of his daughter

$$\frac{S + x}{D + x} = \frac{2}{1}$$

$S + x = 2D + 2x$
$S - 2D = x$
$3S - 6D = 3x$ ……. (2)

Compare both equations

$4D - S = 3S - 6D$
$10D = 4S$
$S : D = 5 : 2$

Hence, option C is correct.

20. 19 years ago, let woman's age = x years and daughter's age = y years

Then, $x + y = 47.5 \times 2 = 95$ years, -------- (i)

At present, the age of woman = x + 19 years and the age of daughter = y + 19 years

According to the question, $2(x + 19) = 5(y + 19)$
$2x - 5y = 95 - 38 = 57$ ------- (i)

Equation (i) × 5 + (ii)

$7x = 475 + 57 = 532$
$x = 76$

19 years ago, daughter's age = $95 - x = 95 - 76 = 19$ years
At present, daughter's age = 19 + 19 = 38 years,
19 years hence, daughter's age = 38 + 19 = 57 years
Hence, option C is correct.

21. 10 years ago, let mother's age = 4x years then daughter's age = x years

Present age of mother = (4x + 10) years
Present age of daughter = (x + 10) years

10 years hence, mother's age = (4x + 20) years and daughter's age = (x + 20) years

According to the question,

$$\frac{4x + 20}{x + 20} = \frac{2}{1}$$

4x + 20 = 2x + 40
2x = 20, x = 10

At present, Mother's age = 4x + 10 = 4 × 10 + 10 = 50 years and daughter's age = x + 10 = 10 + 10 = 20 years

The required sum = 50 + 20 = 70 years

Hence, option D is correct.

22. The sum of the age of man's wife and two twin daughters = 45 × 3 = 135 years

The ratio of the age of wife and a daughter is 5 : 1

Since, the ratio is given of wife and daughter but we need to calculate the age of father i.e. man but we don't have any information about him so we cannot find his age

Hence, option E is correct.

23. At present, let the age of A = 4x years then the age of B = 5x years

5 years ago, let the age of B = 3a years then the age of C = 2a years

5 years hence, C's age = 2a + 10 = 30
a = 10

5 years ago, B's age = 3a = 30 years

At present, B's age = 30 + 5 = 35 years = 5x
x = 7 years

Therefore, at present, A's age = 4x = 4 × 7 = 28 years
Hence, option B is correct.

24. X years ago, let Rohini's age = a years then her father's age = 4a years

X years hence, let Rohini's age = a + 2X years then her father's age = 4a + 2X years

According to the question,

$$\frac{a + 2X}{4a + 2X} = \frac{1}{2}$$

$2a + 4X = 4a + 2X$

$X = a$

At present, the ratio of their age = $(a + X) : (4a + X) = 2 : 5$

The reqd. % = $\frac{2 \times 100}{5} = 40\%$

Hence, option E is correct.

25. The average age of the family of 5 was 32 years. Hence, the sum of the ages of these 5 people must have been $32 \times 5 = 160$.

3 years later, each person will grow older by 3 years. Hence, the sum of the ages must be $160 + 15 = 175$.

Now, the eldest member has died. So the sum of the ages of all the members of the family will become $175 – 60 = 115$

20 years from now, each member will grow older by 20 years. Hence, the sum of the ages of 5 people will be $115 + 20 \times 5 = 215$

Hence, the average age of the family will be

$\frac{215}{5} = 43$ years

Hence, option B is correct.

26. Let father's age be x, and father's father age be y.

Then, ATQ,

$7x = 3y$ or, $y = \frac{7x}{3}$

Nine years ago,

ATQ,

$(x - 9) = \frac{1}{3}(y - 9)$

Replacing the value of y, and simplifying, we get,

$3(x - 9) = \frac{7x}{3} - 9$

$3(3x - 27) = 7x - 27$
$9x - 81 = 7x - 27$
$2x = 81 - 27 = 54$

$x = \frac{54}{2} = 27$ years

father's father's age $= \frac{7x}{3} = 7 \times 9 = 63$ years

father's son's age $= (27)^{1/3} = 3$ years

Ratio of ages (in required sequence) = 63 : 3 : 27 = 21 : 1 : 9

Hence, option D is correct.

27. Let Radha's present age = x
Then her mother's present age = 6x
Also given that Radha' mother's age will be thrice of Mohan's age after 12 years.

So, Mohan's age after 12 years $= \frac{1}{3} \times (6x + 12) = 2x + 4$
Also given that Mohan's 8th birthday was celebrated 4 years back.
So, Mohan's age after 12 years = 4 + 8 + 12 = 24 years
Now, 2x + 4 = 24
x = 10
So, Radha's mother's present age = 60 years
Hence, option B is correct.

28. Let the present ages of A and B are 4x and 5x years respectively and the present ages of C and D are 5y and 6y years respectively.

∴ Sum of the ages of A, B, C and D = 4x + 5x + 5y + 6y = 40.5 × 4

⇒ 9x + 11y = 162 ----(i)

Also given that, Age of A after two years will be 50% of the age of D 6 years hence.

⇒ 2 × (4x + 2) = 6y + 6

⇒ 4x – 3y = 1 ----(ii)

From the equations (i) and (ii), we get,

⇒ x = 7

⇒ y = 9

∴ The present ages of A, B, C and D are 28, 35, 45 and 54 respectively.

∴ Present average age of B and C = $\frac{35 + 45}{2}$ = 40 years

Hence, option A is correct.

29. Present age of Kavita = 16 years

Age of Kavita one year ago = (16 – 1) = 15 years

Age of Mona after four years = 15 × 2 = 30 years

Present age of Mona = (30 – 4) = 26 years

Sum of the present ages of Mona, Sonika and Kavita = 22 × 3 = 66 years

Present age of Sonika = (66 – 16 – 26) = 24 years

Present average age of Kavita and Sonika = x = $\frac{24 + 16}{2}$ = 20 years

So, the value of 'x' is 20

So option D is the correct answer.

30. Let initial average age = x years = age of the new boy
Boy's age = x years
Warden's age = 2x + 8

After adding the age of the new boy, average remains same,

According to question

$$\Rightarrow \frac{15x + x + 2x + 8}{17} = 1.1x$$

$$\Rightarrow \frac{18x + 8}{17} = \frac{110x}{100}$$

$\Rightarrow$ x = 11.4 years (approx.)

Hence, option B is correct.

31. Total age of family before marriage of son = 50 × 3 = 150 years
Age of family after 3 years = 150 + 3 × 3 = 159 years

Let, age of wife be 'x' years at time of marriage

According to question,
159 + x = 47 × 4
x = 29 years

Hence, option C is correct.

32. Let the present age of P and Q be 3x years and 4x years.
Q's age after 4 years = 4x + 4

$$\text{R's age after 4 years} = \frac{4x + 4}{4} \times 5 = 5x + 5$$

R's present age = 5x + 5 – 4 = 5x + 1
S's present age = 5x + 9

According to the question,
$\Rightarrow$ 3x + 4x + (5x + 1) + (5x + 9) = 28 × 4
$\Rightarrow$ 17x + 10 = 112
$\Rightarrow$ 17x = 102
$\Rightarrow$ x = 6
$\therefore$ S's present age = 5 × 6 + 9 = 39 years
Hence, option D is correct.

33. Let the age of Sanju, Manju, Tanjul and Raju is represented by S, M, T and R (years)

So, S + M + T + R = 34 × 4 = 136 years

Also, (S + 4) : M = 3 : 2

2S + 8 = 3M

And, T : R = 2 : 3

Also, R = S – 8

Using all equations, we get,

$$S + \frac{2S + 8}{3} + \frac{2}{3} \times (S - 8) + (S - 8) = 136$$

3S + 2S + 8 + 2S – 16 + 3S – 24 = 408
10S – 32 = 408
10S = 440

So, $S = \frac{440}{10} = 44$ years

Hence, option D is correct.

34. Just before resignation,

Total age of employees = y × 48 = 10 × 48 = 480

Just after resignation,
Total age of 9 employees = 480 - (53 + x) + 34

One year later,

Total age of employees = 9 × 46 = 414

So one year later, after the incident, each of the 9 employees age is increased by 1 year
∴ 9 × 1 needs to be added

Total age = [480 – 53 – x + 34] + 9 × 1 = 470 - x
∴ 470 – x = 414

⇒ x = 56
Hence, option A is correct.

35. Let the present age of Govind and Bhanumati be 4x years and 3x years respectively

So, age of Govind, 4 years before = (4x – 4) years

So, age of Shankar, 4 years after = 2(4x – 4) years

Therefore, present age of Shankar = [2(4x – 4) – 4] years

According to the question,

$\Rightarrow 2(4x - 4) - 4 + 3x = 27 \times 2$
$\Rightarrow 8x - 8 - 4 + 3x = 54$
$\Rightarrow 11x = 54 + 12$

$\Rightarrow x = \frac{66}{11}$

$\Rightarrow x = 6$

Therefore, present age of Bhanumati = 3 × 6 = 18 years

Hence, option A is correct.

36. Let the present ages of Radha and Ram be 4x and 5x years respectively

So, according to the question,

$= \frac{4x + y}{5x + y} = \frac{9}{11}$

$44x + 11y = 45x + 9y$

$x = 2y$

Also, $\frac{4x - y - 2}{5x - y - 2} = \frac{13}{17}$

$68x - 17y - 34 = 65x - 13y - 26$
$3x - 4y = 8$
$6y - 4y = 8$
$y = 4$ and $x = 8$

So, the present ages of Radha and Ram are 32 years and 40 years respectively
Sum of their ages after 'y' years i.e. after 4 years = 32 + 4 +40 + 4 = 80 years
Hence, option B is correct.

37. At the time of marriage,

Let the age of Monu = 6a years

The age of his wife Monika = 5a years

When Monika's age = 0 years

Mohan's age = 32 years

At the time of marriage, Mohan's age = 5a × 3 = 15a years

Monika's age = (0 + 5a) = 5a years

Mohan's age = (32 + 5a) years

Therefore, 32 + 5a = 15a

10a = 32

a = 3.2 years

It means, at the time of marriage,

Monu's age = 6a = 6 × 3.2 = 19.2 years

Monika's age = 5a = 5 × 3.2 = 16 years

Mohan's age = 5a = 48 years

At present, Mohan = 85 years old

It means, at present means after (85 – 48) = 37 years of marriage

Monu's age = (37 + 19.2) = 56.2 years

Monika's age = (16 + 37) = 53 years

The reqd. average = $\frac{56.2 + 53}{2}$ = 54.6 years

Hence, option B is correct.

38. According to the question,

$\frac{x+3}{y-2} = \frac{9}{8}$

$8x + 24 = 9y - 18$

$9y - 8x = 42$

Also,

$\frac{y-2}{y-x+17} = \frac{4}{5}$

$5y - 10 = 4y - 4x + 68$

$y + 4x = 78$

Solving both the equations,

We get $x = 15$

So, $y = (78 - 60) = 18$

So, age of Doraemon = $(15 + 3) = 18$ years

So, age of Nobita = $(18 - 2) = 16$ years

So, age of Shizuka = $(18 - 15 + 17) = 20$ years

Therefore, reqd. average = $\frac{18 + 16 + 20}{3} = \frac{54}{3} = 18$ years

Hence, option B is correct.

39. Let the ages of A and B five years ago were 5x years and 8x years respectively
So, the present ages of A and B are '5x + 5' years and '8x + 5' years respectively

Present age of D = $\frac{5x + 5}{0.75} = \frac{20x + 20}{3}$ years

Age of D after 10 years = $\frac{20x + 20}{3} + 10 = \frac{20x + 50}{3}$ years

Age of C after 10 years = $\frac{20x + 50}{3} \times \frac{9}{10}$ = (6x + 15) years

Present age of C = (6x + 15 – 10) = 6x + 5 years
According to the question

$5x + 5 + 8x + 5 + \frac{20x + 20}{3} + 6x + 5 = 4 \times 37.5$

77x + 65 = 450
77x = 385 ; x = 5
So, the present age of B = (8 × 5 + 5) = 45 years
Present age of C = (6 × 5 + 5) = 35 years
So, the difference between the ages of B and C = (45 – 35) = 10 years
Hence, option C is correct.

40.

Member	Wedding	Karan died & kalpana born	10yrs after wedding
Karan	62		
Ajay	y		y +10
Kajal	z		z +10
Kalpana			a
Average Age	38		25

At the time of wedding, average age = 38

So, $\frac{62 + y + z}{3} = 38$

62 + y + z = 114
y + z = 52
10rys after wedding, average age = 25

$\frac{y + 10 + z + 10 + a}{3} = 25$

y + z + a + 20 = 75
y + z + a = 55
a = 55 – 52 = 3
So, the age of daughter 10 yrs after wedding is 3 yrs, which means she was born 7yrs after wedding.
So, karan died 7 yrs after wedding at the age of = (62 + 7) = 69yrs
Hence, option C is correct.

41. 2011----------2016----------2020
50 new baby 45

If no member had died and no new member had joined the family, the average age in 2020 would have been 59. But it is 45 yrs.

The average age decreased by 14yrs (59 – 45)
So, the decrease in the total age of the family = 5 × 14 = 70yrs
The age of the baby in 2020 = 4 yrs

The decrease is due to change of just one person, the eldest person with the new born baby. So, the difference between their ages is 70 yrs.

So, the age of eldest man had he been alive is 70 + 4 = 74 years

Hence, option A is correct.

Alternate Solution:-
In 2020 the age of the baby = 4 years
Average age of the family in 2020 = 45 X 5 = 225 years
So, total age of the remaining 4 members in 2020 = 221 years
or , total age of the remaining 4 members in 2011 = 221 – (9 X 4) = 185 years
Total age of the family of 5 members in 2011 = 250 years
So, the age of the eldest member of the family in 2011 = (250 – 185) years = 65 years
So, if the eldest person was alive in 2020 his age would be (65 + 9) years = 74 years

Hence, option A is correct.

42. The age of grandfather = x years
And the age of son = y years

According to the question,
$\frac{(x + y)}{(x – y)} = \frac{5}{4}$

By Solving we get,
$\frac{x}{y} = \frac{9}{1}$

Let us assume x = 9z and y = z
Then, $\frac{(9z + 5)}{(z + 5)} = \frac{5}{1}$

=> z = 5
the required difference = x – y = 9z – z = 8z = 40 years.
Hence, option E is correct.

43. Ratio of age of Shyam to Ram is 3 : 5 and Ram to Radha is 2 : 3

So Ratio of age of Shyam, Ram and Radha = (3 × 2) : (5 × 2) : (3 × 5) = 6 : 10 : 15

According to question difference in ages of Radha and Shyam is 27 years

15x – 6x = 27

9x = 27

x = 3

So total of their present ages = (6 + 10 + 15) × 3.

Hence, the average of their present ages

$= \frac{(6 + 10 + 15) \times 3}{3}$ = 31 years

Hence, option D is correct.

44. Current sum of ages = 150 yrs.

Sum of ages 10 years ago = 120 yrs.

Since the ratio of their age 3 years ago was

5 : 4 : 3

∴ 5x + 4x + 3x = 120

x = 10 yrs.

Hence the ratio of their ages after 10 years = 5 × 10 + 20 : 4 × 10 + 20 : 3 × 10 + 20

= 70 : 60 : 50 = 7 : 6 : 5

Hence, option B is correct.

45. Let 8 years ago A's age = 13x years and B's age = 5x years

6 years hence A's age = 13x + 8 + 6 = 13x + 14 years and B's age = 5x + 8 + 6 = 5x + 14 years

$$\frac{13x + 14}{5x + 14} = \frac{33}{17}$$

By solving, x = 4

At present, A's age = 13x + 8 = 52 + 8 = 60 years and B's age = 5x + 8 = 28 years

z

The required ratio = (60 + 28) : (60 – 28) = 88 : 32 = 11 : 4

Hence, option B is correct.

46. Bala Ji's age + Srisanth's age = 35 × 2 = 70

Harbhajan's age + Srisanth's age = 32 × 2 = 64

Bala Ji's age + Harbhajan's age = 38 × 2 = 76

On adding all,

2(Bala Ji's + Harbhajan's + Srisanth's) age = 70 + 64 + 76

$$\text{(Bala Ji + Harbhajan + Srisanth)'s age} = \frac{210}{2} = 105$$

$$\text{Average of all the three} = \frac{105}{3} = 35$$

$$\text{Average of Zaheer and Nehra} = \frac{35}{2} = 17.5$$

$$\text{Reqd. answer} = \frac{35 \times 3 + 17.5 \times 2}{5} = 28$$

Hence, option B is correct.

47. Let the age of Sonny, Aarav and Punit be s, a and p respectively.

The ratio of the age of Sonny and Aarav is given so, s = 4x and a = 5x

p = 5x + 5

p = 4x + 8

5x + 5 = 4x + 8

x = 3

So the present age of Sonny, Aarav is 12 and 15 years respectively.

The age of Punit = 5(3) + 5 = 20 years

After 5 years,

Sum = (12 + 5) + (15 + 5) + (20 + 5) = 62 years

Hence, option B is correct.

48. Let the present age of Aishwarya and Abhishek be X and Y years respectively.

$$\frac{X-5}{Y+7}=\frac{3}{4}$$

4X – 20 = 3Y + 21

4X – 3Y = 41 .....(i)

2X = 2 (Y + 2)

2X – 2Y = 4 .....(ii)

Solving (i) and (ii)

Y = 33 years and X = 35 years

Hence, option E is correct.

49. Let, age of Sonu = 'x' years

Age of Manish = 'x + 6' years

Age of Rahul = 'x + 14' years

So, $\frac{x}{x+14} = \frac{5}{12}$

$12x = 5x + 70$

$7x = 70$, $x = 10$

Age of Manish after 12 years = x + 6 + 12 = 28 years

Hence, option C is correct.

50. Let At present, A's age = 4x years then B's age = 5x years

10 years before, A's age = 4x – 10 years

B's age = 5x – 10 years

According to the question,

$\frac{4x-10}{5x-10} = \frac{19}{25}$

By solving, x = 12

At present, A 's age = 4x = 48 years

B's age = 5x = 60 years

C's age = A's age + 12 = 48 + 12 = 60 years

The reqd. average = $\frac{48+60+60}{3}$ = 56 years

Hence, option A is correct.