

IEM KOLKATA**AVERAGE**

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Q1) The average of 7 consecutive natural numbers is K. If the next 3 natural numbers are also included, how much more than K will be the average of these 10 numbers?

- (a) 1 (b) 1.5 (c) 2 (d) 2.5

Q2) The captain of a cricket team of 11 members is 26 years old and the wicketkeeper is 3 years older. If the ages of these two are excluded, the average age of the remaining players is one year less than the average age of the whole team. What is the average age of the team?

- (a) 23 years (b) 24 years (c) 25 years (d) None of these

Q3) A student finds the average of 10 positive integers. Each integer contains two digits. By mistake the boy interchanges the digits of one number say ba for ab. Due to this, the average becomes 1.8 less than the previous one. What was the difference between the two digits a and b?

- (a) 2 (b) 4 (c) 6 (d) None

Q4) A batsman played 11 innings and has a certain average. This average increases by 2 runs when his 3 innings of 32 runs, 33 runs and 34 runs are replaced by 3 other innings. Find the average of these 3 new innings?

Q5) In a class there were 9 boys and some girls. In a test the mean score obtained by the boys was 12 while that obtained by girls was 14. If the overall average was 13.1, what was the total number of students in the class?

- (a) 21 (b) 20 (c) 22 (d) 19

Q6) A man bought 20 cows for ₹200000. If the average cost of 12 cows is ₹12500, then what will be the average cost of remaining cows?

- (a) ₹6250 (b) ₹6000 (c) ₹6235 (d) ₹6520

Q7) Of the 20 cycles sold by Ajay, average cost of 12 cycles is ₹18000. In total he earned ₹300000. What was the average cost of remaining cycles?

Q8) Without considering the salary of the boss, the average salary reduces by ₹1000. What will be the salary of the boss if average salary of 11 employees and the boss is ₹18000?

Q9) Average age of 5 people is 42 years. Another group has 8 people who have average age of 81 years. When both groups are mixed what is the average age of all people?

Q10) Aman is three times as old as Ravi. 2 years ago he was five times as old as Ravi. What is the present age of Aman?

Q11) 12 years ago, age of P was 3 times the age of Q. After 12 years, ratio of ages of Q to P will be 2:3. What is the present age of P?

- (a) 24 years (b) 36 years (c) 48 years (d) None

Q12) Rohan is as much younger than Ajay as he is older than Meena. The sum of ages of Ajay and Meena is 108 years. How old is Rohan?

- (a) 27 years (b) 54 years (c) 45 years (d) 81 years

Q13) Rohan's age is five times Ajay's and $\frac{7}{18}$ th of Meenna's age. The sum of the ages of all three of them is 132 years. How much younger is Ajay to Meena?

Q14) Ram and Shyam's average age is 65 years. The average age of Ram, Shyam and John is 53 years. What is the age of John?