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| |  |  | | --- | --- | | 1) | From a container , full of pure milk , 20% is replaced by water and this process is repeated 3 times. At the end of third operation , the quantity of pure milk reduces to | |  | |  |  | | --- | --- | | a) | 40.0% | | b) | 50.0% | | c) | 51.2% | | d) | 58.8% |   . | |

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| |  |  | | --- | --- | | 2) | A 20 litre mixture of milk and water contains milk and water in the ratio 3: 2. 10 litres of the mixture is removed and replaced with pure milk and the operation is repeated once more. At the end of the two removals and replacement, what is the ratio of milk and water in the resultant mixture? | |  | |  |  | | --- | --- | | a) | 17:3 | | b) | 9:1 | | c) | 3:17 | | d) | 5:3 |   . | |

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| |  |  | | --- | --- | | 3) | A merchant has 100 kg of sugar ,part of which he sells at 7% profit and the rest at 17% profit. He gains 10% on the whole. How much is sold at 17%? | |  | |  |  | | --- | --- | | a) | 28 kg | | b) | 30 kg | | c) | 32 kg | | d) | 31 kg |   . | |

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| |  |  | | --- | --- | | 4) | Pure milk costs Rs 40 per litre. By adding water to it and selling the mixture for Rs 49/- , 40% profit is made. In what ratio pure milk and water are mixed? | |  | |  |  | | --- | --- | | a) | 1:1 | | b) | 2:1 | | c) | 4:1 | | d) | 9:1 | | e) | 7:1 |   . | |

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| |  |  | | --- | --- | | 5) | A batsman scored 75 runs in his 27th inning thereby increasing his average by 2 runs. Find the average runs made by the batsman after 27th inning?( Assuming he is out in all the innings) | |  | |  |  | | --- | --- | | a) | 21 | | b) | 23 | | c) | 25 | | d) | 25.5 |   . | |

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| |  |  | | --- | --- | | 6) | Find the average of the first 50 even natural numbers? | |  | |  |  | | --- | --- | | a) | 25 | | b) | 25.5 | | c) | 50 | | d) | 51 |   . | |

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| |  |  | | --- | --- | | 7) | The average age of a group of friends is 32 years. If four new friends with an average of 27 years join the group, the average of the entire group now becomes 30 years. How many people were there in the group initially? | |  | |  |  | | --- | --- | | a) | 4 | | b) | 6 | | c) | 8 | | d) | 10 |   . | |

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| |  |  | | --- | --- | | 8) | A family of 6 has an average 25 and another of 9 has an average 41. The sum of the ages of the family members of both will be: | |  | |  |  | | --- | --- | | a) | 165 | | b) | 375 | | c) | 455 | | d) | 615 | | e) | none |   . | |

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| |  |  | | --- | --- | | 9) | The average height of a class of 18 students is 105 cm. After the arrival of 7 new students the average decreases by 5cm. Find sum of the heights of all the students in the class. | |  | |  |  | | --- | --- | | a) | 1890 | | b) | 2500 | | c) | 2625 | | d) | 2890 | | e) | none |   . | |

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| |  |  | | --- | --- | | 10) | Find the average of first 97 natural numbers. | |  | |  |  | | --- | --- | | a) | 47 | | b) | 37 | | c) | 48 | | d) | 49 | | e) | 49.5 |   . | |

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| |  |  | | --- | --- | | 11) | The sum of two whole numbers is 66. Which of the following can be the ratio of the two numbers? | |  | |  |  | | --- | --- | | a) | 13 : 4 | | b) | 19 : 3 | | c) | 17 : 3 | | d) | 21 : 7 |   . | |

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| |  |  | | --- | --- | | 12) | Two numbers are in the ratio 3 : 2. If 20 is subtracted from each of them, the ratio changes to 5 : 3. What is the smaller number of the two? | |  | |  |  | | --- | --- | | a) | 80 | | b) | 70 | | c) | 60 | | d) | 90 |   . | |

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| |  |  | | --- | --- | | 13) | If A : B = 2 : 3, B : C = 9 : 4, C : D = 8 : 1, What is the value of A : D ? | |  | |  |  | | --- | --- | | a) | 12:3 | | b) | 12:2 | | c) | 12:1 | | d) | None |   . | |

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| |  |  | | --- | --- | | 14) | Two numbers are in the ratio 2 : 7. If each number is increased by 5, the ratio changes to 3 : 8. What is the sum of two numbers? | |  | |  |  | | --- | --- | | a) | 35 | | b) | 45 | | c) | 55 | | d) | None |   . | |

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| |  |  | | --- | --- | | 15) | If a, b, c and d are proportional then the mean proportion between a2 + c2 and b2 + d2 is | |  | |  |  | | --- | --- | | a) | ad/dc | | b) | ab + cd | | c) | a/b + d/c | | d) | b2/a2 + d2/c2 | | e) | a/b + d2/c2 |   . | |

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| |  |  | | --- | --- | | 16) | If 0.4 of a number is equal to 0.06 of another number, the ratio of the numbers is : | |  | |  |  | | --- | --- | | a) | 2:3 | | b) | 3:4 | | c) | 3:20 | | d) | 20:3 |   . | |

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| |  |  | | --- | --- | | 17) | Rasika and Nikita invested amounts of Rs. 40,000 and Rs. 75,000 resepectively. At the end of five year they got a total dividend of Rs. 46,000. What is Rasika's share in the dividend? | |  | |  |  | | --- | --- | | a) | Rs. 16500 | | b) | Rs. 15500 | | c) | Rs. 15000 | | d) | Rs. 16000 | | e) | None of these |   . | |

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| |  |  | | --- | --- | | 18) | Avinash invested an amount of Rs. 25000 and started a business. Jitendra joined him after one year with an amount of Rs. 30000. After two year from starting the business, they earned the profit of Rs. 46000. What will be Jitendra's share in the profit? | |  | |  |  | | --- | --- | | a) | Rs. 14000 | | b) | Rs. 12000 | | c) | Rs. 7667 | | d) | Rs. 200000 | | e) | None of these |   . | |

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| |  |  | | --- | --- | | 19) | Ratio of Sujeet's age to Sameer's age is 4 : 3 Sujeet will be 26 years old after 6 years. Then the present age of Sameer is: | |  | |  |  | | --- | --- | | a) | 21 years | | b) | 15 years | | c) | 24 years | | d) | 18 years | | e) | None of these |   . | |

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| |  |  | | --- | --- | | 20) | If 6 years are subtracted from the present age of Randheer and the remainder is divided by 18, then the present age of his grandson Anup is obtained. If Anup is 2 years younger to Mahesh whose age is 5 years, then what is the age of Randheer? | |  | |  |  | | --- | --- | | a) | 96 years | | b) | 84 years | | c) | 48 years | | d) | 60 years | | e) | None of these |   . | |