**Questions:**

**1.Class P has 30 students of which 20 like Music. In class Q, 10 students like Music. Find the number of students in Class Q if the average number of students who like Music in a class is 16.**

**a)30**

**b)25**

**c)40**

**d)20**

**2.There are 10 points in three parallel planes, the first plane contain 5 points, the second plane contains 3 points and the third plane contain rest of them, then how many triangles to be formed?**  
a)104   
b)109   
c)105   
d)106

3.A boy travelled by train which moved at the speed of 30 mph. He then boarded a bus which moved at the speed of 40 mph and reached his destination. The entire distance covered was 100 miles and the entire duration of the journey was 3 hours. Find the distance he travelled by bus.

a) 45 miles

b) 40 miles

c) 60miles

d) 65 miles

4.Ajay and Balu together can do a piece of work in 12 days. Balu and Charan together can do the same work in 16 days. After Ajay has been working at it for 5 days and Balu for 7 days, Charan finishes it in 13 days. In how many days will Charan alone be able to do the work?

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|  | a)16 days |
|  | b)24 days |
|  | c)36 days |
|  | d)48 days  5.Two pipes can fill a tank in 20 and 24 minutes respectively and a waste pipe can empty 3 gallons per minute. All the three pipes working together can fill the tank in 15 minutes. The capacity of the tank in gallons is?   |  | | --- | | 1. 100 2. 110 3. 120 4. 140 |   6. Ajay marked the price of his goods 30% more than his C.P. He then sells 1/4th of his stock at a discount of 15%, and half of the stock at the marked price, and the rest at a discount of 30%. Find his gain percentage.   |  |  |  |  |  |  |  |  |  |  |  | | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | | a)16.5%  b)15.375%  c)14.20%  d)13.37%  7.A housewife has 11 liter of solution that contains sodium carbonate solution and benzene solution in the ratio 3: 1. She adds 250 ml of 3: 2 solution of sodium carbonate and benzene solution to it and then uses 250 ml of the combined mixture to make strong organic solution How much of pure sodium carbonate solution is she left with?   |  |  | | --- | --- | |  | a)1000 ml | |  | b)912.5 ml | |  | c)750 ml | |  | d)720 ml | |  |  | | | 8.Ajay pays Rs 8.0 per litre of spirit. He adds water and sells the mixture at Rs 9 per litre, thereby making 40 % profit. The proportion of water to spirit received by the customers is   |  |  | | --- | --- | |  | a)45:11 | |  | b)11:45 | |  | c)2:45 | |  | d)45:2 | |  | 9.Two boats, traveling at 5 and 10 kms per hour, head directly towards each other. They begin at a distance of 20 kms from each other. How far apart are they (in kms) one minute before they collide?  a)1/12  b)1/6  c)1/4  d)1/3 | |  | **10.A man reaches his office 20 min late if he walks from his home at 3 km per hour and reaches 30 min early if he walks 4 km per hour. How far is his office from his house?**  1)20km 2)16km 3)14km 4)10 km  11.**How many kilograms of sugar costing Rs. 9 per kg must be mixed with 27 kg of sugar costing**Rs.**7 per kg so that there may be a gain of 10% by selling the mixture at Rs. 9.24 per kg?**  1) 36 2) 42 3) 54 4) 63  **12.Ram & Shyam started from a point X and Y respectively and started moving towards each other. After they met Ram took 4 hours to reach Y and Shyam took 16 hours to reach X. Ram’s speed is 48**kmph**. What is the speed of Shyam?**  a)24kmph  b)56kmph  c)34kmph  d)12kmph  13.There are 20 persons among whom two are sisters. Find the number of ways in which we can arrange them around a circle so that there is exactly one person between two sisters? Please note that the exact position on the circle does not matter (no seat numbers are marked on the circle), and only the relative positions of the people matter.  a)2!\*19! b)None of these c)2\*18! d)18!  14.Find the length of the longest pole that can be placed in an indoor stadium 24m long, 18m wide and 16m high.  a)36m b)34m c)30m d) 25m  15. Of a set of 30 numbers, the average of first 10 numbers is equal to the average of last 20 numbers. Then the sum of the last 20 numbers is:  a)Sum of first ten numbers b) 2 X sum of the first ten numbers c) Cannot be determined with the given data d) 2 x sum of last ten numbers  **Answers:**   |  |  | | --- | --- | | **1) d** | **9) c** | | **2) b** | **10) d** | | **3) b** | **11) d** | | **4) b** | **12) a** | | **5) c** | **13) c** | | **6) b** | **14) b** | | **7) d** | **15) b** | | **8) b** |  | | | |  |  | |  |  | |  |  | |
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