

1. The value of diamond varies directly as the square of its weight. If a diamond falls and breaks into two pieces with weights in the ratio 2:3. what is the loss percentage in the value?
2. Five college students met at a party and exchanged gossips. Uma said, "Only one of us is lying". David said, "Exactly two of us are lying". Thara said, "Exactly 3 of us are lying". Querishi said, "Exactly 4 of us are lying". Chitra said "All of us are lying". Which one was telling the truth?
a)David b)Querishi c)Chitra d)Thara
3. Cara, a blue whale participated in a weight loss program at the biggest office. At the end of every month, the decrease in weight from original weight was measured and noted as 1, 2, 6, 21, 86, 445, 2676. While Cara made a steadfast effort, the weighing machine showed an erroneous weight once. What was that.
a) 2676 b) 2 c) 445 d) 86
4. The letters in the word ADOPTS are permuted in all possible ways and arranged in alphabetical order then find the word at position 42 in the permuted alphabetical order?
a) AOTDSP b) AOTPDS c) AOTDPS d) AOSTPD
5. A man who goes to work long before sunrise every morning gets dressed in the dark. In his sock drawer he has 6 black and 8 blue socks. What is the probability that his first pick was a black sock, but his second pick was a blue sock?
6. Total number of 4 digit number do not having the digit 3 or 6.
7. Find the missing in the series: 70, 54, 45, 41,_____.
8. A school has 120, 192 and 144 students enrolled for its science, arts and commerce courses. All students have to be seated in rooms for an exam such that each room has students of only the same course and also all rooms have equal number of students. What is the least number of rooms needed?
9. A boy travels in a scooter after covering $\frac{2}{3}$ rd of the distance the wheel got punctured he covered the remaining distance by walk. Walking time is twice that of the time the boy's riding time. How many times the riding speed as that of the walking speed?
10. In a soap company a soap is manufactured with 11 parts. For making one soap you will get 1 part as scrap. At the end of the day you have 251 such scraps. From that how many soaps can be manufactured?
11. The population of a town increased from 1,75,000 to 2,62,500 in a decade. The average percent increase of population per year is:
12. Robert is travelling on his cycle and has calculated to reach point A at 2 P.M. if he travels at 10 kmph, he will reach there at 12 noon if he travels at 15 kmph. At what speed must he travel to reach A at 1 P.M.?
13. A and B can do a work in 8 days, B and C can do the same work in 12 days. A, B and C together can finish it in 6 days. A and C together will do it in :
14. Two boys starting from the same place walk at a rate of 5kmph and 5.5kmph respectively. What time will they take to be 8.5km apart, if they walk in the same direction?
15. A Man travelled a distance of 61 km in 9 hours. He travelled partly on foot at 4 km/hr and partly on bicycle at 9 km/hr. What is the distance travelled on foot?
16. An athlete runs at a speed of 30 km/hr around a circular ground whose area is 2464 m². How much time does he take to complete one round around the ground?
17. The distance between two cities A and B is 330 Km. A train starts from A at 8 a.m. and travel towards B at 60 km/hr. Another train starts from B at 9 a.m and travels towards A at 75 Km/hr. At what time do they meet?

18. On a 26 question test, 5 points were deducted for each wrong answer and 8 points were added for right answers. If all the questions were answered how many were correct if the score was zero.
a. 10 b. 11 c. 13 d. 12
19. Arun makes a popular brand of ice cream in a rectangular shaped bar 6cm long, 5cm wide and 2cm thick. To cut costs, the company had decided to reduce the volume of the bar by 19%. The thickness will remain same, but the length and width will be decreased by some percentage. The new width will be,
a. 5.5 b. 4.5 c. 7.5 d. 6.5
20. If all the numbers between 11 and 100 are written on a piece of paper. How many times will the number 4 be used?
21. If twenty four men and sixteen women work on a day, the total wages to be paid is 11,600. If twelve men and thirty seven women work on a day, the total wages to be paid remains the same. What is the wages paid to a man for a day's work?
22. The cost price of a cow and a horse is Rs 3 lakhs. The cow is sold at 20% profit and the horse is sold at 10% loss. Overall gain is Rs 4200. What is the cost price of the cow?
23. B alone can do piece of work in 10 days. A alone can do it in 15 days. If the total wages for the work is Rs 5000, how much should B be paid if they work together for the entire duration of the work?
a. 2000 b. 4000 c. 5000 d. 3000
24. How many 4-digit numbers contain no.2?
25. Assume that $f(1)=0$ and $f(m+n)=f(m)+f(n)+4(9mn-1)$. For all natural numbers (Integers >0)m and n. What is the value of $f(17)$?
a. 5436 b. 4831 c. 5508 d. 4832
26. The sticks of same length are used to form a triangle as shown below. If 87 such sticks are used then how many triangles can be formed?
27. 11, 23, 47, 83, 131, . What is the next number?
a. 145 b. 178 c. 176 d. 191
28. Rs378 is divided among the three children such that 12 times of anusha is equal to 8 times of babu which is equal to 6 times of Esha. how much the Rupee anusha get?
29. $xy+yz=63$, $xz+yz=23$, find $x+y+z$
30. if $(p/q)-(q/p)=21/10$, then what ia the value of $(4p/q)+(4q/p)$
a. 58/5 b. 59/5 c. 121/105