- 1. A family has several children. Each boy in this family has as many sisters as brothers but each girl has twice as many brothers as sisters. How many brothers and sisters are there?
- 2. 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 u have 251 such scraps. From that how many soaps can be manufactured?
- 3. There is a 5digit no. 3 pairs of sum is eleven each. Last digit is 3 times the first one. 3 rd digit is 3 less than the second.4 th digit is 4 more than the second one. Find the digit.
- 4. Every day a cyclist meets a train at a particular crossing. The road is straight before the crossing and both are traveling in the same direction. The cyclist travels with a speed of 10 Kmph. One day the cyclist comes late by 25 min. and meets the train 5km before the crossing. What is the speed of the train?
- 5. Two twins have certain peculiar characteristics. One of them always lies on Monday, Wednesday, and Friday. The other always lies on Tuesdays, Thursdays and Saturdays. On the other days they tell the truth. You are given a conversation. Person A-- today is Sunday my name is Anil Person B -- today is Tuesday, my name is Bill what day is today?
- 6. There are 81 horses and 9 tracks, i.e. at a time you can race 9 horses. What is the minimum no of races to be conducted to find out fastest 3 horses.
- 7. One guy has Rs. 100/- in hand. He has to buy 100 balls. One football costs Rs. 15/, One Cricket ball costs Re. 1/- and one table tennis ball costs Rs. 0.25 He spend the whole Rs. 100/- to buy the balls. How many of each balls he bought?
- 8. A lorry starts from Banglore to Mysore at 6.00 A.M,7.00am.8.00 am.....10 pm. Similarly one another starts from Mysore to Banglore at 6.00 am,7.00 am, 8.00 am.....10.00pm. A lorry takes 9 hours to travel from Banglore to Mysore and vice versa. A lorry which has started at 6.00 am will cross how many lorries.
- 9. A tennis championship is played on a knock-out basis, i.e., a player is out of the tournament when he loses a match. How many players participate in the tournament if 31 matches are totally played?
- 10. When I add 4 times my age 4 years from now to 5 times my age 5 years from now, I get 10 times my current age. How old will I be 3 years from now?
- 11. A block of wood in the form of a cuboid  $4" \times 10" \times 13"$  has all its six faces painted pink. If the wooden block is cut into 520 cubes of  $1" \times 1" \times 1"$ , how many of these would have pink paint on them?

12. "Dad, where had you been?" asked Michael.

"I had been to the attic, my son," replied Dad. "And do you know what I saw there? There was a big web with 18 spiders and flies on it."

"How many spiders were there?" asked the little boy with curiosity.

"Well, there were a total of 128 legs on the web," answered Dad with a smile. "Now you can find out how many spiders were there by yourself. Can't you?"

How many spiders were on the web in the attic?

- 13. There is a number that is 2 times the sum of its digits. What is this number?
- 14. The drive from Pune to Lonavala was a tricky one. I covered the uphill distance of 45 miles at 35 miles per hour. The return journey from Pinewood to Oakland was downhill, and I managed to drive at 63 miles per hour. What was my average speed for the entire journey?
- 15. A snake slides through a long cylindrical hole in the ground at 6 centimeters per second. The hole is 8.22 meters in length. The snake takes 13 seconds to enter the hole.
- 16. Consider 7 lines drawn at a tangent to an ellipse. The lines break up the plane into several regions, some bounded (i.e., enclosed) and others unbounded. How many unbounded regions are there?
- 17. A set of football matches is to be organized in a "round-robin" fashion, i.e., every participating team plays a match against every other team once and only once. If 105 matches are totally played, how many teams participated?
- 18. Bodo weighs 160 pounds more than his sister Michelle. Their combined weight is 200 pounds. How many pounds does Bodo weigh?
- 19. It was vacation time, and so I decided to visit my cousin's home. What a grand time we had! In the mornings, we both would go for a jog. The evenings were spent on the tennis court. Tiring as these activities were, we could manage only one per day, i.e., either we went for a jog or played tennis each day. There were days when we felt lazy and stayed home all day long.
  - Now, there were 14 mornings when we did nothing, 18 evenings when we stayed at home, and a total of 16 days when we jogged or played tennis. For how many days did I stay at my cousin's place?
- 20. Warren takes the underground train to work and uses an escalator at the railway station. If Warren runs up 7 steps of the escalator, then it takes him 50.0 seconds to reach the top of the escalator. If he runs up 15 steps of the escalator, then it takes him only 30.0 seconds to reach the top.
  - How many seconds would it take Warren to reach the top if he did not run up any steps of the escalator at all?