

- . At 6'o a clock ticks 6 times.  
The time between first and last ticks is 30 seconds.  
How long does it tick at 12'o clock.

Ans: 66 sec. (2 marks)

2. Three friends divided some bullets equally.  
After all of them shot 4 bullets the total number of bullets remaining is equal to the bullets each had after division.  
Find the original number divided.

Ans: 18 (2 marks)

Initially . x x x  
Now x-4 x-4 x-4  
Equation is  $3x-12 = x$

3. A ship went on a voyage.  
After it had travelled 180 miles a plane statrted with 10 times the speed of the ship.  
Find the distance when they meet from starting point.

Ans: 200miles. (2 marks)  
Distance travelled by plane = 1/10 distance travelled by ship + 180

4. Complete the Table given below:

Three football teams are there. Given below is the group table. Fill in the x's

|   | Played | Won | Lost | Draw | Goals For | Goals Against |
|---|--------|-----|------|------|-----------|---------------|
| A | 2      | 2   | x    | x    | x         | 1             |
| B | 2      | x   | x    | 1    | 2         | 4             |
| C | 2      | x   | x    | x    | 3         | 7             |

Ans: The filled table is given below (4 marks)

|   | Played | Won | Lost | Draw | Goals For | Goals Against |
|---|--------|-----|------|------|-----------|---------------|
| A | 2      | 2   | 0    | 0    | 7         | 1             |
| B | 2      | 0   | 1    | 1    | 2         | 4             |
| C | 2      | 0   | 1    | 1    | 3         | 7             |

5. There are 3 societies A, B, C.  
A lent cars to B and C as many as they had already.

After some time B gave as many tractors to A and C as many as they have. After sometime c did the same thing. At the end of this transaction each one of them had 24.

Find the cars each originally had.

Ans: A had 39 cars, B had 21 cars & C had 12 cars (4 marks)

6. There N stations on a railroad.

After adding X stations on the rail route 46 additional tickets have to be printed.

Find N and X.

Ans.  $x=2$  and  $N=11$

Let initially,  $N(N-1) = t$

After adding,  $(N+X)(N+X-1) = t+46$

By trail and error method (4 marks)

7. Given that April 1 is tuesday.

A, B, C are 3 persons told that their farewell party was on

λ A - May 8, thursday

λ B - May 10,tuesday

λ C - June 5, friday

Out of A, B, C only one made a completely true statement concerning date,day and month

The other told two one told the day right and the other the date right..

What is correct date, month, day.

Ans: B - (May 10) SUNDAY

C - June 6 (Friday). (5 marks)

8. The Bulls, Pacers, Lakers and Jazz ran for a contest.

Anup, Sujit, John made the following statements regarding results.

λ Anup said either Bulls or Jazz will definitely win

λ Sujit said he is confident that Bulls will not win

λ John said he is confident that neither Jazz nor Lakers will win

When the result came it was found that only one of the above three had made a correct statement.

Who has made the correct statement and who has won the contest.

Ans: Sujith; Lakers (5marks )

9. Five people A ,B ,C ,D ,E are related to each other.

Four of them make one true statement each as follows.

(i) B is my father' s brother.

(ii) E is my mother-in-law.

(iii)C is my son-in-law' s brother

(iv) A is my brother's wife.

Ans: (i) D

(ii) B

(iii) E

(iv) C

(10 marks)

10. Some statements are given below:

- λ L says all of my other four friends have money
- λ M says that P said that exactly one among them has money
- λ N says that L said that precisely two among them have money
- λ O says that M said that three of the others have money
- λ P, L and N said that they have money

All the above statements are false..

Who has money & who doesn't have any money?

(5 marks)