

1. A person needs 6 steps to cover a distance of one slab. if he increases his foot length(step length) by 3 inches he needs only 5 steps to cover the slabs length. what is the length of the each slab. (ans 31 inches).

2. There are 19 red balls and one black ball . Ten balls are put in one jar and the remaining 10 are put in another jar.  
what is the possibility that the black is in the right jar. ( The question is bit of confusing but the answer is  $\frac{1}{2}$ ).

3. There is one lily in the pond on 1st june. There are two in the pond on 2nd june . There are four on 3rd june and so on. The pond is full with lilies by the end of the june. i)On which date the pond is half full.ans. 29th. --the june has 30 days) (ii)if we start with 2 lilies on 1st june when will be the pond be full with lilies. (ans. 29th june)

4.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. (i) A lorry which has started at 6.00 am will cross how many lorries. (ans. 10 )  
(ii)A lorry which had started at 6.00pm will cross how many lorries. (ans. 14)

5 .A person meets a train at a railway station coming daily at a particular time . One day he is late by 25 minutes,  
and he meets the train 5 k.m. before the station. If his speed is 12 kmph, what is the speed of the train. (ans. 60 kmph.)refer--Shakuntala devi book.

7. A thief steals half the total no of loaves of bread plus  $\frac{1}{2}$  loaf from a bakery. A second thief steals  
half the remainig no of loaves plus  $\frac{1}{2}$  loaf and so on. After the 5th thief has stolen there are no more  
loaves left in the bakery. What was the total no of loaves did the bakery have at the biggining. (ans: 31).

8. A gardener plants 100 meters towards east, next 100 meters towards north,next 100 meters towards west. 98  
meters towards east, 96 meters towards north and 96 meters towards west, 94 meters towards south. and 94 meters towards east and so on. If a person walks between the trees what is the total distance travelled by him before he reaches the center.

9. Long division:

example: 1089709/12 ?

ANALYTICAL

4 question---40 marks; 40 minutes;

1. There are four women and 3 men. They play bridge one nighth. Find widow among them.

Rules:

(i) wife and husand are never partners

ii wife and husand never play more than one game.

One nighth they played four games as follows;

1. ----- + ----- vs ----- + -----

2. ----- + ----- vs ----- + -----

3. ----- + --\*--- vs ----- + -----

4. ---\*- + ----- vs ----- + -----

the woman are marked \* above.

ans: refer problem 21. mind teasers by Summers.

2. There are 5 peoples; few of them speak true, few of them false.

Identify them.

3. & 4.th problems on Venn diagram