

Puzzle – 13

Q- Fastest 3 Horses Puzzle

There are 25 horses among which you need to find out the fastest 3 horses. You can conduct race among at most 5 to find out their relative speed. At no point you can find out the actual speed of the horse in a race. Find out how many races are required to get the top 3 horses.

My Approach and Solution –

What we can do is we make group of five horse is so there are five groups and we make the horses race them against their groups and find out the fastest horse in a group.

Let's say we have got in these five horses. Now we will make them race the winners of the previous race.

This will make the groups of horses and upon the basis of the winner's position and then we will find out the fastest horse in all of them. That is, we have found the first position.

For the second and third position will again keep a race from the second and third position from the group 1 and first and second version from group two and the first version from group three and whatever will get out the results. Let's say we get the first and the second position, they will be finalized at the second and third horse in their relative speed.

Therefore, the total number of races will be $5+1+1=7$