

1. 7 cars – T, L, C, H, O, K and P are parked in a straight line facing north not necessarily in the same order. Distance between each car is a successive multiple of 6 m from right to left.

Distance between K and L is in a multiple of seven. White car is third to the right of Red car. White car is not a neighbor of Pink car. C is parked to the left of O and distance between them is 78 m. More than one car is between Blue and Black car. K is to the right of H and the distance between them is a common factor of 3 and 11. T is not a neighbor of O. Yellow car is third to the left of Orange car. Pink car is not parked at the end. Distance between Red car and Yellow car is 12m more than the distance between car O and K. T is second to the left of P and distance between them is 30m.

2. Certain number of persons were standing in a queue. They all have different color of umbrella with them. Given below are some information about them. Twice the sum of the position of B and C is equal to the position of the person holding Orange umbrella, who is standing among the first ten person in the queue. Person having Blue umbrella is immediately followed by a person standing at a position which is square of a number one third of K's position. There is a gap of three persons between C's position and L's position. M is standing just ahead of the one having Pink umbrella. Neither C or K or L is holding a Pink umbrella. B is five places ahead of K. K is not holding Orange umbrella. C is not three places ahead of K. Total Number of persons in row is less than 16. Number of persons between the person holding Blue and Pink umbrella is not more than twice the gap of position between K and the person holding Black umbrella. Person holding Black umbrella is two places ahead of the person holding Blue umbrella. K is not the only between the persons holding Blue and Orange umbrella.

3. Nine Students – A through I participated in a pyramid competition organized by a school. They formed a three floored pyramid having five children at the base, three children at the middle and one of them at the top such that those three at the base which are not at the extreme ends are just below the one at the middle and the one at the top is just above the one who is in the middle of the middle floor. They all have different color of handkerchief with them, viz Red, Black, Blue, Yellow, Pink, White, Orange, Green and Brown but not necessarily in the same order. They all have different weights viz, 21 kg, 22 kg, 24 kg, 25 kg, 27 kg, 28 kg, 30 kg, 32 kg and 35 kg but not necessarily in the same order. Some information is given below:

D is standing at a position immediate right of the one having Blue handkerchief. A is standing just above the one weighing 30 kgs. B is to the right of the one weighing two kg more than D. E is standing just above the person who is standing third to the right of the one having Brown handkerchief. Difference between the weight of E and F is twice the difference between the weight of E and D. One having Pink handkerchief is just below the one having Black handkerchief. Only F stands between G and C. G do not have green colored handkerchief. F do not stand just below D. Student weighing 24 kgs do not stand at the top. Student weighing maximum stands to the immediate left of D. Total weight of all the three students standing

at the center of each floor is 77 kgs. Average weight of the middle floor is $30\frac{2}{3}$ kgs. I is standing second to the left of the one having Pink handkerchief. I do not have Blue handkerchief. A's weight is in even number. B and G together weighs 49 kgs. C do not own a Blue handkerchief neither weighs 35 kgs. G weighs 4 kg more than the one having orange handkerchief. C do not have red handkerchief. B have a green handkerchief. The person having White handkerchief is in the middle floor.

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