Salutation to your solution!

- Sudhakar Attili.

- 1. In an equilateral triangle, lines are drawn from each vertex to the opposite side to a point trisecting the side. Now there are 7 segments. It is found that the area of each segment is a multiple of 1/21 of the total area. Can you give the proportional area of each segment?
- 2. Find the value of $\{2 4 + 6 8 + 10 12 + \dots$ up to 198 $\}$.
- 3. Find the next number in the patterns below
 - (a) 60, 90, 108, 120, 128.571428, 135, 140, <u>?</u> (b) 3, 7, 15, 31, 63, <u>?</u>
- 4. There were three thieves who stole whole lot of money from a bank. They could not count the money at that hour, so they decided to go to bed. The first thief woke up after some time, he was genuine enough to divide the whole money into 3 equal parts and leaving the 2 parts in its location. The second thief got up after some time, (like minded people only can work together) he divided the money into 3 equal parts and left the 2 parts. Then the third thief got up and took his one part leaving the other two parts. When they got up in the morning they divided the money into three equal parts and took their parts. By doing this they got the money in a ratio 35: 26: 20. The total amount and the individual amounts are exactly in thousands. Can you tell the money they stole in the beginning?
- 5. A person is driving a car with a velocity of 12.8 ft/sec. He sees a person crossing the road 6 yards away. He applies brakes at a deceleration of 16 ft/sec². Can he be able to stop the car without hitting the pedestrian?

You can send your answers either by post or by e-mail to the below address on or before *March 15th*.

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Can you figure out? A car number plate shows **MKY MOUZ**. What does that mean? See the answer with a magnifying glass here \rightarrow