RAM Maths Circle

Date: September 27, 2025 Swami Vivekanand School, Dombivli

In this session, the mentors had given the following questions to students.

- 1. A school has students of age between 5 years to 16 years. A family has children studying in that school. If the product of their ages 60060 then what is the number of children from that family?
- 2. The sides of triangle are 5, 12 and 13 units. A rectangle of width 10 units is constructed whose area is equal of the triangle. Find the perimeter of the rectangle.
- 3. Two numbers are such that their difference, their sum, and their product are in the ratio 1:4:15. What is the sum of the two numbers?
- 4. Saee broke her necklace. She found one-quarter of the beads on the floor, one-sixth in her pocket, one-third on the table, while one-fifth remained on the necklace; six beads were still missing. How many beads were there to start with?
- 5. A snail crawls $2\frac{1}{2}$ centimeters in $4\frac{1}{4}$ minutes. At this rate, how many centimeters can the snail crawl in 85 minutes?
- 6. Let us call a positive integer "good" if its digits can be divided into two groups so that the sum of the digits of each group is the same. For example, 34175 is good because 3+7=4+1+5. Find smallest 4-digit good number, whose neighbor is also a good number.