

# RAM Maths Circle

Date: January 17, 2026  
Swami Vivekanand School, Dombivli

In this session, the mentors discussed the following puzzles with the students.

1. In 24 hours, how many times do the hour hand and minute hand overlap?
2. Devyani, Pratik, and Sundarm went to the magical land; the entry ticket cost ₹ 5. If each of them has 4 of ₹ 10, ₹ 15 & ₹20 notes respectively. How will they pay for the ticket such that each of them have ₹5 less than their earlier total?
3. 32 people standing in a circle in order 1 to 100. No. 1 has a sword. He kills the next person (i.e., No. 2) and gives the sword to the next (i.e., No. 3). This process is repeated until the last person is left. Which number survives at the last?
  - (a) If there are 100 people in a circle in order 1 to 100.
  - (b) If there are 40 people in a circle in order 1 to 40.
4. THE COIN GAME: There are 2 players with arrangements of 15 coins in a line. Players can remove 1, 2, or 3 adjacent coins. The player who removes the last coin will win. Note: when coin 3 is removed, that does not make 2 and 4 adjacent. What is the winning strategy?