

# RAM Maths Circle

Date: December 27, 2025  
Swami Vivekanand School, Dombivli

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

1. What is  $\frac{2}{101 \times 102} + \frac{2}{102 \times 103} + \frac{2}{103 \times 104} + \frac{2}{104 \times 105} = ?$

2. What is  $\frac{1}{201 \times 202} + \frac{1}{202 \times 203} + \frac{1}{203 \times 204} + \frac{1}{204 \times 205} \cdots \frac{1}{300 \times 301} = ?$

3. Consider a chocolate bar with square pieces. Suppose two players play a game using this chocolate bar. The lower left square is considered "poison". Players take turns picking a square. With each choice, all squares above and to the right of the picked square are no longer available, they are eaten. The person forced to take the "poison" square loses. Can you find the winning strategy?

O	O	O	O
O	O	O	O
O	O	O	O
	O	O	O