

RAM Maths Circle

Date: December 13, 2025
Swami Vivekanand School, Dombivli

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

1. Find all possible pairs of (x, y) where x & y are positive integers.

(a) $x + 3y = 10$

(b) $x + 3y = 100$

2. A crossnumber is like a crossword expect that the answers are numbers, with one digit in each square. What is the sum of all eight digits in this crossnumber?

Across 1. Square of a prime
4. Prime
5. Square

Down 1. Square of another prime
2. Square
3. Prime

1	2	3
4		
5		

3. The code for my bank card is a four-digit integer. No digit is zero. The first digit is twice the third digit. The fourth digit is three times the second digit. The four-digit integer is a multiple of 9. What is the code for my bank card?