RAM Maths Circle

Date: November 08, 2025
Swami Vivekanand School, Dombivli

In this session, the mentors introduced addition & multiplication principle and discussed the following questions with the students.

1. There are 3 bridges to go from Dombivili east(E) to Dombivili west(W), and from Dombivili west, there are 2 routes to reach the School(S). In how many ways can you go from Dombivili east to the School?

2. In Dombivli, from East(E), there are 3 bridges to reach location 1 in dombivili west(W_1) and 2 bridges to reach location 2 in dombivili west(W_2). There are 2 routes to reach school from location 1 (W_1) and 4 routes from location 2 (W_2). There are no routes between W_1&W_2. How many ways are there to get to school from the dombivili east?

3. There are 4 students B_1, B_2, G_1 & G_2. how many ways can they be arranged in a row?

4. There are 4 boys B_1, B_2, B_3, & B_4 and 3 girls G_1, G_2, & G_3.

   I. In how many ways can you arrange them in a row?
   II. In how many ways can they be arranged such that the girl students are always together?