

Practice - Combinations

2024-09-18

Combinations

Question 1: Selecting a Trip Group

The college is organizing a field trip, and 4 students need to be selected from a group of 10 students to attend. How many different groups of students can be selected for the trip?

Question 2: Forming a Faculty-Student Committee

A college is forming a new committee to improve campus facilities, which will consist of 5 members: 3 faculty members and 2 students. If there are 8 faculty members and 7 students available, how many ways can the committee be formed if it must include exactly 3 faculty members and 2 students?

Question 3: Assigning Students to Dorm Rooms

A dormitory has 8 rooms, 12 students need housing but only 8 can be assigned to these rooms. How many different ways can 8 students be chosen to get a room?