

Math 129

Counting

- a) If we roll two dice, how many different **pairs of numbers** can we get? (Imagine that you have a white die and a red die).
 - b) If we roll two dice, how many different **numbers** can we get? (Color doesn't matter here, we just need to look at the total points from both dice).
2. Mrs. Van Dike wants to take a picture of the 10 kids in her band. In how many different orders can the kids appear in the picture?
3. I am writing the menu for the pizza parlor that I will open soon. All pizzas have tomato sauce and cheese, and I have 10 other toppings available (pepperoni, sausage, mushroom, etc.). If I want to list **all** the different kinds of pizza that I offer (including just cheese), how many different pizzas will I have in my menu?
4. Coach Waters is organizing a soccer tournament. If 12 teams are participating and each team has to play every other team once in the first round, how many games does he need to schedule for the first round?