

Denver Math Club
November Meeting
Stars and Bars Worksheet

1. Alice has 24 apples. In how many ways can she share them with Becky and Chris?
2. Alice has 24 apples. In how many ways can she share them with Becky and Chris so that each of the three people has at least two apples?
3. When 7 fair standard 6-sided dice are thrown, the probability that the sum of the numbers on the top faces is 10 can be written as $\frac{n}{6^7}$, where n is a positive integer. What is n ?
4. Pat is to select six cookies from a tray containing only chocolate chip, oatmeal, and peanut butter cookies. There are at least six of each of these three kinds of cookies on the tray. How many different assortments of six cookies can be selected?
5. Find N , if N denotes the number of 7 digit positive integers have the property that their digits are in increasing order. (Repeated digits are allowed.)