

Exercises for Chapter 5

Exercise 42. A set menu proposes 2 choices of starters, 3 choices of main dishes, and 2 choices of desserts. How many possible set menus are available?

Exercise 43. • In a race with 30 runners where 8 trophies will be given to the top 8 runners (the trophies are distinct, there is a specific trophy for each place), in how many ways can this be done?

- In how many ways can you solve the above problem if a certain person, say Jackson, must be one of the top 3 winners?

Exercise 44. In how many ways can you pair up 8 boys and 8 girls?

Exercise 45. How many ternary strings of length 4 have zero ones?

Exercise 46. How many permutations are there of the word “repetition”?