

Series No. 01: Compromise Analysis

Exercise 01:

06 workers were invited to attend a meeting at a company to form a workers' representative committee.

1. How can they sit in a row with six seats?
2. How can they form a committee of 03 workers?
3. How can they form a committee of 03 workers containing a President, Rapporteur and Secretary General?

Exercise 02:

Let us have the following words: MATHS, STATISTICS.

- How many words can be formed (no matter the meaning) of the letters of the two words in each case?

Exercise 03:

Someone wanted to create a password for their e-mail using the numbers, how many words can be created and made up of:

1. Three digits with the possibility of redundancy?
2. Four digits without duplication?
3. Two doubles and two individualized numbers with the possibility of redundancy?

Exercise 04:

One college wanted to create a student committee out of 20 second-year students, and 15 third-year students.

1. Identified the number of possible cases of the Commission's containment of two second-year students and three third-year students?
2. Created a number of possible cases for the Committee's inclusion of a Chairman, a Deputy and a Deputy Assistant?

Exercise 05:

The owner of the factory decided to promote 04 workers. Twenty workers were nominated, including 12 men and 08 women. How can the four workers be selected in the following cases:

1. All candidates can be selected?
2. Should two men and two women be promoted?
3. To exclude two men from candidates whose entitlement to promotion has been challenged, with the second condition remaining?

Exercise 06:

The Scientific Council of a College consists of 15 members. In order to hold this Council, a quorum of 10 members must be present.

1. How exactly can a quorum be secured?
2. How to secure at least a quorum?