



Introduction to Linear programming and Mathematical Problem solving

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GLOSSARY

Objective function

The *objective function* indicates how each variable contributes to the value to be optimized in solving the problem.

Constraints

It refers to minimum or maximum level of some activity or condition

Resource constraints

In a resource constraint, the coefficient $a_{j,i}$ indicates the amount of resource j used for each unit of activity i , as represented by the value of the variable X_i . The right-hand side of the constraint (b_j) indicates the total amount of resource j available for the project.

Linear programming

A mathematical method to allocate resources to competing activities in an optimal manner when the problem can be expressed using a linear objective function and linear inequality constraints.

formulation

Formulation is the process of translating a real-world problem into a linear program