



Apply Linear Programming Methods in Solving Problems

Achieved	Merit	Excellence
Apply linear programming methods in solving problems.	Apply linear programming methods, using relational thinking, in solving problems.	Apply linear programming methods, using extended abstract thinking, in solving problems.
<u>Relational Thinking</u> - Involves selecting and carrying out a logical sequence of steps, connecting different concepts or representations, demonstrating understanding of concepts, and relating findings to a context.		
<u>Extended Abstract Thinking</u> - Involves devising a strategy, identifying relevant concepts, developing logical reasoning, forming generalizations, and communicating mathematical insight.		

Linear Programming Methods

The methods included in this standard are related to:

- Identifying variables and constraints
- Formulating objective functions and constraints
- Solving linear programming problems using graphical or simplex methods
- Interpreting and evaluating solutions

Problems

Situations set in real-life or statistical contexts that provide opportunities to apply knowledge or understanding of linear programming knowledge and methods.

Key Vocabulary

Students are expected to understand and use terms related to Linear Programming methods, such as:

- | | | |
|-----------------------------------------------|-------------------------------------------|-------------------------------------------|
| <input type="checkbox"/> Constraints | <input type="checkbox"/> Optimal solution | <input type="checkbox"/> Graphical method |
| <input type="checkbox"/> Objective function | <input type="checkbox"/> Simplex method | <input type="checkbox"/> Feasible region |
| <input type="checkbox"/> Degenerate solutions | <input type="checkbox"/> Corner points | |