Instituto Tecnológico de Costa Rica

Operations Research - Semester II

Knapsack Problem

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Maximize

$$Z = 1.00x_1$$

Subject to

$$1.50x_1 \leq 1.00$$

Simplex Table

	Z	x_1	s_1	b
	1.00	-1.00	0.00	0.00
	0.00	1.50	1.00	1.00

Results

	Z	x_1	s_1	b
	1.00	0.00	0.67	0.67
	0.00	1.00	0.67	0.67

Objective Value

$Z = 0.67$

Variables

$x_1 = 0.67$

Slack or Surplus

$s_1 = 0.00$