

Assignment 1

Operations research

The Primo Insurance Company is introducing two new product lines: special risk insurance and mortgages. The expected profit is \$5 per unit on special risk insurance and \$2 per unit on mortgages.

Management wishes to establish sales quotas for the new product lines to maximize total expected profit. The work requirements are as follows:

Department	Work-Hours per Unit		Work-Hours Available
	Special Risk	Mortgage	
Underwriting	3	2	2400
Administration	0	1	800
Claims	2	0	1200

- According to the previous problem, solve the following equations:
 1. Formulate the model of the problem as you learned in OR course
 2. Find the optimal solution using Graphical method
 3. Find the optimal solution using Simplex method