Problem Description

A factory produces Product A and Product B:

Product A yields a profit of $40 per unit.

Product B yields a profit of $30 per unit.

Constraints:

Each unit of Product A requires 1 hour of labor and 2 units of material.

Each unit of Product B requires 2 hours of labor and 1 unit of material.

The factory has a maximum of 100 hours of labor available.

The factory has a maximum of 80 units of material available.

The goal is to maximize profit.