

### Example of Practical Optimization Problem

A butter production company wants to optimize the use of the machineries in its daily production of butter. Two types of butter are made – sweet and raw. One kilogram of sweet butter gives the company a profit of \$10 and one of raw a profit of \$15. Two machines are used in the production: a pasteurization machine and a whipping machine. The daily use time of the pasteurization machine is 3.5 hours and 6 hours for the whipping machine. The processing times (in minutes) are given below:

Machine	Sweet butter	Raw butter
Pasteurization	3	3
Whipping	3	6