

# DECESION VARIABLES

No of backpacks each type to be made.

No of units:

Collegiate - C

Minis - M

## OBJECTIVE FUNCTION

Maximize the profit

$$\text{MaxP} = 32C + 24M$$

## CONSTRAINTS

Limited Resources

$$3C + 2M \leq 5000$$

$$C \leq 1000$$

$$M \leq 1200$$

## MATHEMATICAL FORMULATION OF THE LP PROBLEM

$$45C + 40M \leq 35 \times 40 \times 60$$

$$45C + 40M \leq 8400$$

$$C, M \geq 0$$