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1)

Wild must produce two types cookies

- i) Build the mathematical model
- ii) Solve the problem graphically.

	Type 1	Type 2
Labor	3	1
Huts per Day	100	300
Profit	8\$	5\$
	x_1	x_2

i) Max $z = 8x_1 + 5x_2$ ①

$x_1 \leq 100$ ②

$x_2 \leq 300$ ③

$100x_1 + 300x_2 \leq 450x_2 \Rightarrow 100x_1 - 150x_2 \leq 0 \Rightarrow 2x_1 \leq 3x_2$ ④

$3x_1 \leq x_2 \Rightarrow 3x_1 - x_2 \leq 0$ ⑤

$x_1, x_2 \geq 0$ ⑥

Optimum point
(100, 300)

ii)

