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(Q1) Two types that → max profit.

Type 1 → three times Type 2

Full T_2 → 450 per day

T_1 → 100 → 8 $

T_2 → 300 → 5 $

i. math. model

ii. solve graphically

(1) Type 1 → x labor

Type 2 → y labor

$x = 3y$

$y \rightarrow 450$

$x \rightarrow 150$

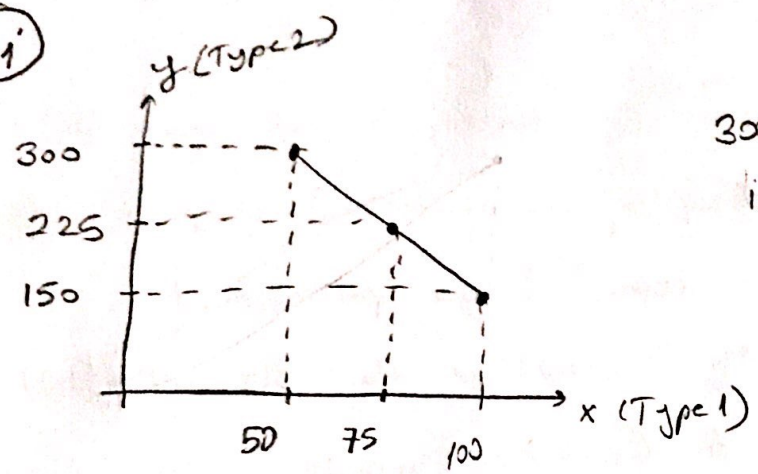
$100x + 150y = 800 + 750 = 1550 \rightarrow$ profit

$50x + 300y = 400 + 1500 = 1900 \rightarrow$ profit

$75x + 225y = 600 + 1125 = 1725 \rightarrow$ profit

✓ 50 Type 1 and 300 Type 2 is max profit.

(1.1)



300 Type 2 and 50 Type 1 is the most profitable choice.