I am aware that any forms of cheating in this exam will result in a zero grade and a disciplinary investigation. I accept all rules and regulations regarding online exams. I give permission for the processing of my personal data as stated in the clarification text provided on the Faculty of engineering website

Batuhan Bastürk
150119035

1)

type 1 → 3T
type 2 → T

Type 2 → 450

type 1 → 100 hats per day
type 2 → 300 hats per day

type 1 profit → 8$
type 2 profit 5$

type$_1$ → x_1
type 2 → x_2

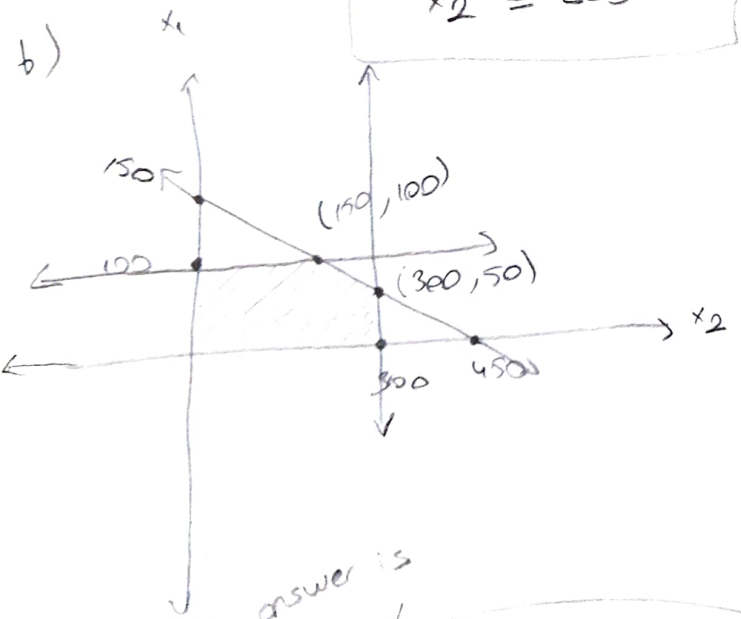
a) $z = 8x_1 + 5x_2$

$3x_1 + x_2 \leq 450$

$x_1 \leq 100$

$x_2 \leq 300$

b)



the answer is

$x_2 = 300$
$x_1 = 50$ iqin → 1500 + 400 = 1900$ profit

$x_2 = 150$
$x_1 = 100$ iqin → 750 + 800 = 1550

Q1) Wild West produces two types of cowboy hats. A type 1 hat requires three times as much labor time as a type 2. If the all available labor time is dedicated to type 2 alone, the company can produce a total of 450 type 2 hats a day. The market limits for the two types are 100 and 300 hats per day for type 1 and type 2. The profit is $8 per Type 1 and $5 per type 2 hat determine the number of hats of each type that would profit.