Question 1 : B, D, E

Question 2 :

A.

Let X_1 : number of TV AD

X_2 : number of Print Magazine

Objective : Min $500000 X_1 + 75000 X_2$

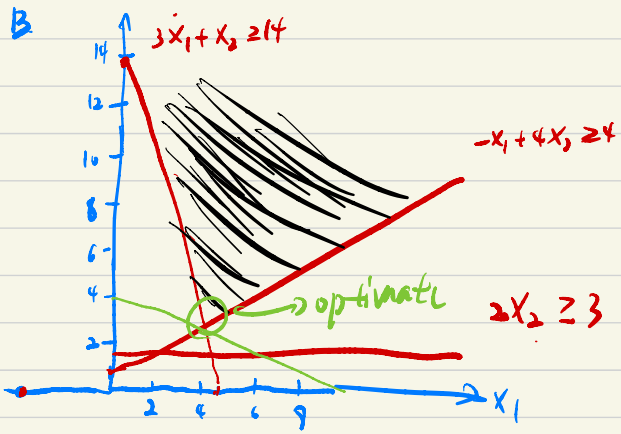
S.t. $2X_2 \geq 3$ (sedan)

$3X_1 + X_2 \geq 14$ (SUV)

$-X_1 + 4X_2 \geq 4$ (truck)

$X_1, X_2 \geq 0$

B



C. $-X_1 + 4X_2 = 4$ -① $\times 3$

$3X_1 + X_2 = 14$ -②

$-3X_1 + 12X_2 = 12$

$13X_2 = 26$

$X_2 = 2 \quad X_1 = 4$

Ans : $X_1 = 4 \quad X_2 = 2$

Question 3:

A Let X_1: number of Razors produced
X_2: number of Zoomers produced

objective Max $70X_1 + 40X_2$

s.t. $X_1 + X_2 \leq 700$
$X_1 - X_2 \leq 300$
$2X_1 + X_2 \leq 900$
$3X_1 + 4X_2 \leq 2400$
$X_1, X_2 \geq 0$

B