1)
$$X_3 = Empresa$$
 $X_2 = Particulare$

Maximizar $286X_3 + 3+9X_2$
 $2X_2 - X_2 \ge 0$
 $X_3 + X_2 \le 90$
 $X_1 \le 20$
 $X_3 \times X_2 = 0$
 $X_3 \times X_2 = 0$
 $X_3 \times X_2 = 0$

Maximizar $3000X_3 + 700X_2$
 $300X_3 - 500X_2 = 0$
 $300X_3 - 500X_2 = 0$

 $X_1, X_1 \geq 0$