

Let  $x_m, x_s, x_a, x_g, x_c, x_t$  be number of bought memberships, number of bought singles, number of bought albums, number of bought goods, number of used credit cards, and number of bought tickets respectively.

Let  $M$  be large variable.

Objective: Maximize  $10x_m + 3x_s + 7x_a + x_g + 30x_c + 3x_t + 17$

Constraints

1.  $x_m \in \{0,1\}$
2.  $x_s \leq 5$
3.  $x_a \leq 2$
4.  $x_g \leq M$
5.  $x_c \in \{0,1\}$
6.  $x_t \geq 1$
7.  $x_t \leq 4$
8.  $x_m + x_s + x_a + x_g \leq 7$
9.  $Mx_c + x_m + x_s + x_a + x_g \leq M$
10.  $7000x_m + 1500x_s + 4000x_a + 1000x_g + 6000x_c + 13000x_t \leq 70000$
11.  $x_s, x_a, x_g, x_t \in \mathbb{Z}^+ \cup \{0\}$

## Result Variables

Variables	
number of membership	1
number of single	4
number of album	2
number of goods	0
Use credit card	0
number of tickets	3

Serial Code	Cost	Increased Chance	Limit
Official fanclub membership	7000	10	1
Latest single	1500	3	5
Latest album	4000	7	2
Goods from Jingle's Store	1000	1	100
Credit Card	6000	30	1
Buddy Up	13000	3	4
SUM	60000	62	

The maximum chance is 62% by spending 60000 baht