

## 8321 Sim Card

There are three mobile operators in Iran. Each operator has different prices for call and data usage, given in the table below. All prices are in Rials:

#	Name	Call (per minute)	Data (per megabyte)
1	ParsTel	30	40
2	ParsCell	35	30
3	ParsPhone	40	20

Some foreign students have arrived Iran to participate in the ACM-ICPC, Tehran Site. They already know how many minutes they will call, and how much Internet they will use. For each student, you want to recommend an operator to minimize the total cost of call usage and data usage for that student.

### Input

Each line of the input contains the information of one student. For each student, there are two positive integers  $c$  and  $d$  ( $1 \leq c, d \leq 1000$ ) that show the amount of call (in minutes) and data usage (in megabytes) for the student, respectively.

The input terminates with '0 0' that should not be processed.

### Output

For each student, print a line containing the minimum total cost of call usage and data usage.

### Sample Input

```
10 60
100 20
24 12
900 400
50 50
0 0
```

### Sample Output

```
1600
3800
1200
43000
3000
```