# **Spending Money**

Hasan has P taka. He goes a chocolate shop . The chocolate shop has only 'Kitkat' & 'Dairy Milk' . The price of a single 'Dairy milk' is M taka and a single 'Kitkat' is N taka .

If any person wish to buy 'Dairy Milk' , he/she must have to be buy exatly 1 or 2 or 4 or 8 'Dairy Milks' at a time .

If any person wish to buy 'kitkat' , he/she must have to be buy exatly 7 or 14 or 28 'kitkats' at a time .

Hasan wants to spend as much money as he can . As, Hasan is weak in mathematics,he wants your help.

Now, you need to calcuate the minimum remaining money that Hasan will have after buying chocolates.

#### Input

First line contains a positive integer T, which is the number of testcase.

In each testcase there will be three integers  ${\sf P}$  ,  ${\sf M}$  ,  ${\sf N}.$ 

1 <= T <= 25

1 <= P <= 3\*10^10

30 <= M , N <= 10^10

The summation of all P in all testcase will not exceed 1.2\*10^11

## Output

For each testcase print the minimum money that Hasan will have after buying chocolates in one line.

See the sample input outout for better understanding.

## Example

#### Input: 3 150 30 35 167 40 35 99999989 31 31

Output:

0