


Problem C

Buying Coke

Problem ID: coke
CPU Time limit: 1 second
Memory limit: 1024 MB

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I often buy Coca-Cola from the vending machine at work. Usually I buy several cokes at once, since my working mates also like coke. A coke in the vending machine costs 8 Swedish crowns, and the machine accepts crowns with the values 1, 5 and 10. As soon as I press the coke button (after having inserted sufficient amount of money), I receive a coke followed by the exchange (if any). The exchange is always given in as few coins as possible (this is uniquely determined by the coin set used). This procedure is repeated until I've bought all the cokes I want. Note that I can pick up the coin exchange and use those coins when buying further cokes.

Now, what is the least number of coins I must insert, given the number of cokes I want to buy and the number of coins I have of each value? Please help me solve this problem while I create some harder problems for you. You may assume that the machine won't run out of coins and that I always have enough coins to buy all the cokes I want.

Input

The first line in the input contains the number of test cases (at most 100). Each case is then given on a line by itself. A test case consists of four integers: C (the number of cokes I want to buy), n_1 , n_5 , n_{10} (the number of coins of value 1, 5 and 10, respectively). The input limits are $1 \leq C \leq 150$, $0 \leq n_1 \leq 500$, $0 \leq n_5 \leq 100$ and $0 \leq n_{10} \leq 50$.

Output

For each test case, output a line containing a single integer: the minimum number of coins needed to insert into the vending machine.

Sample Input 1

```
3
2 2 1 1
2 1 4 1
20 200 3 0
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Sample Output 1

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5
3
148
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