Problem V
Very Heavy
Time limit: 3 seconds
Memory limit: 256 megabytes

Problem Description

There are eight kinds of Euro coins: 0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1, and 2 euros. You have $a_{0.01}, a_{0.02}, a_{0.05}, a_{0.1}, a_{0.2}, a_{0.5}, a_1, a_2$ coins in your pocket, respectively. I.e., you have

$$0.01a_{0.01} + 0.02a_{0.02} + 0.05a_{0.05} + 0.1a_{0.1} + 0.2a_{0.2} + 0.5a_{0.5} + a_1 + 2a_2$$

euros. The coins are heavy, so you decide to keep as few as you can. Therefore, you will pay exactly x euros to avoid receiving any coin change when you buy an item at price x euros. Because you are going to leave Europe, you do not want to get any coin back. You will not buy an item at price x euros if you cannot make x euros from coins your pocket. Furthermore, you want to spend as many coins as possible to buy an item. Please compute how many coins can you spend for buying a souvenir at price p euros.

Input Format

The first line of the input contains an integer t ($t \leq 10000$) indicating the number of test cases. Each test case is a line containing the 9 non-negative integers

$$P, a_{0.01}, a_{0.02}, a_{0.05}, a_{0.1}, a_{0.2}, a_{0.5}, a_1, a_2$$

separated by blanks. You have a_d d-euro coins for $d \in \{0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2\}$, and the price of the souvenir is $0.01P$ euros. You may assume $P \leq 10^9$ and all the other integers are at most 10^7.

Output Format

For each test case, output the maximum number of coins can be spent. If you cannot buy the souvenir at price $0.01P$, output `-1`.

Sample Input

```
3
99 0 50 0 1 1 1 1 1
99 0 50 1 1 1 1 1 1
99 0 2 4 5 4 2 1 1
```

Sample Output

```
-1
48
11
```