

When I was born, I was 5 斤 2 两。 Sorry for non-Chinese people. Here's what it means:

1 斤 =0.5kg

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So 5 斤 2 两 means $0.5*5+0.05*2=2.6$ kg.

Given similar information for other babies, your task is to find out their weights in kg.

Input

The first line contains the number of test cases T ($T \leq 100$). Each test case contains a string in format 'a 斤 b 两' ($1 \leq a \leq 10$, $1 \leq b \leq 9$) or 'a 斤' ($1 \leq a \leq 10$).

The input file will be encoded with UTF-8 without BOM (if you don't know what it is, you can safely ignore it).

Output

For each test case, print the ACCURATE weight in kg (without trailing zeros).

Sample Input

```
3
5 斤 2 两
7 斤 3 两
6 斤
```

Sample Output

```
Case 1: 2.6
Case 2: 3.65
Case 3: 3
```