

Calories From Fat

Fat contains about 9 Calories/g of food energy. Protein, sugar, and starch contain about 4 Calories/g, while alcohol contains about 7 Calories/g. Although many people consume more than 50% of their total Calories as fat, most dieticians recommend that this proportion should be 30% or less. For example, in the *Nutrition Facts* label to the right, we see that 3g of fat is 5% of the recommended daily intake based on a 2,000 calorie diet. A quick calculation reveals that the recommended daily intake of fat is therefore 60g; that is, 540 Calories or 27% Calories from fat.

Others recommend radically different amounts of fat. Dean Ornish, for example, suggests that less than 10% of total caloric intake should be fat. On the other hand, Robert Atkins recommends the elimination of all carbohydrate with no restriction on fat. It has been estimated that the average Atkins dieter consumes 61% of Calories from fat.

From a record of food eaten in one day, you are to compute the percent Calories from fat. The record consists of one line of input per food item, giving the quantity of fat, protein, sugar, starch and alcohol in each. Each quantity is an integer followed by a unit, which will be one of: g (grams), C (Calories), or % (percent Calories). Percentages will be between 0 and 99. At least one of the ingredients will be given as a non-zero quantity of grams or Calories (not percent Calories).

Input

Input will consist of several test cases (at most 150). Each test case will have one or more lines as described above (at most 100). Each test case will be terminated by a line containing '-'. An additional line containing '- ' will follow the last test case.

Output

For each test case, print percent Calories from fat, rounded to the nearest integer.

Sample Input 1

```
3g 10g 10% 0g 0g
55% 100C 0% 0g 30g
-
25g 0g 0g 0g 0g
-
1g 15% 20% 30% 1C
-
-
```

Sample Output 1

```
53%
100%
32%
```

Nutrition Facts			
Serving Size ½ cup (114g)			
Servings Per Container 4			
Amount Per Serving			
Calories 90		Calories from Fat 30	
		% Daily Value*	
Total Fat	3g	5%	
Saturated Fat	0g	0%	
Cholesterol	0mg	0%	
Sodium	300mg	13%	
Total Carbohydrate	13g	4%	
Dietary Fiber	3g	12%	
Sugars 3g			
Protein 3g			
Vitamin A 80%		•	Vitamin C 60%
Calcium 4%		•	Iron 4%
* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:			
		Calories:	2,000 2,500
Total Fat	Less than	65g	80g
Sat Fat	Less than	20g	25g
Cholesterol	Less than	300mg	300mg
Sodium	Less than	2,400mg	2,400mg
Total Carbohydrate	Less than	300g	375g
Dietary Fiber	Less than	25g	30g
Calories per gram:			
Fat 9 • Carbohydrate 4 • Protein 4			

Problem ID: calories
CPU Time limit: 1 second
Memory limit: 1024 MB
Difficulty: 2.0

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