problem **3**

Weight Calculator

3 points

hp codewars

2013

Introduction

Did you know that if you were standing on the moon you'd only weigh about 1/6 of your weight on Earth? The surface gravity of celestial bodies (moons, planets, Pluto, etc.) in the solar system varies widely according to the body's mass and radius.

Write a program to compute a person's weight on the surface of a celestial body.

Input

Each line of input will contain a person's name, their weight (in pounds, on Earth), a single-word name of a celestial body, and a conversion factor for the surface gravity on that body. The last line of input is the word "END" followed by three zeros.

```
Fred 179.0 Luna 0.1654
Layla 131 Mars 0.376
Pat 145.2 Neptune 1.14
Rajavel 156.4 Ganymede 0.146
END 0 0 0
```

Output

The program must convert each weight and print the result using the format shown below. Weights must match the expected values within +/- 1 pound.

```
On Luna, Fred would weigh 29.6066 pounds.
On Mars, Layla would weigh 49.256 pounds.
On Neptune, Pat would weigh 165.528 pounds.
On Ganymede, Rajavel would weigh 22.8344 pounds.
```