Programming for Beginners – 24 April 2016

Problem 1. Sweet Dessert

Ivancho and his girlfriend are **throwing a party**. She plans **to cook her favorite dessert**. She asks Ivancho to **buy** the **needed products**. The **number of desserts** depends on **how many people will be coming**. She can prepare the dessert **in portions of 6**. If there are **5 guests** coming, she will still **cook 6 portions, 10 guests – cook 12**. The products for the dessert are **bananas, eggs and berries**. For **a set of 6** she needs **2 bananas, 4 eggs and 0.2 kilos berries**.

You will be given **the amount of money Ivancho has**, the **number of guests** and the **prices of the products**. You have to help Ivancho **calculate** if the **cash** he has is **enough to buy all of the products**, or how much more money he needs.

Input

The input data should be read from the console. It will consist of **exactly 5 lines**:

- The **amount of cash** Ivancho has – **floating-point number** in **range [0.00…1,000,000,000.00]**
- The **number of guests – integer in range [0…1,000,000,000]**
- The **price of bananas** for a **single unit – floating-point number** in **range [0.00…1,000.00]**
- The **price of eggs** for a **single unit – floating-point number** in **range [0.00…1,000.00]**
- The **price of berries** for a **kilo – floating-point number** in **range [0.00…1,000.00]**

The **input data will always be valid** and in the format described. **There is no need to check it explicitly**.

Output

The output should be printed on the console.

- **If the calculated price of the products is less or equal to the money Ivancho has:**
  - `"Ivancho has enough money - it would cost {the cost of the products}lv."`
- **If the calculated price of the products is more than the money Ivancho has:**
  - `"Ivancho will have to withdraw money - he will need {neededMoney}lv more."`
- **All prices** must be **rounded to two digits after the decimal point.**

Examples

Input	Output	Comments
10 12 0.35 0.20 4.50	Ivancho has enough money - it would cost 4.80lv.	For 12 guests – 2 sets of 6 portions Needed product: 2*(2 bananas), 2*(4 eggs), 2*(0.2 kilos berries) 2*(2*0.35) + 2*(4*0.20) + 2*(0.2*4.50) = 4.80 4.80 <= 10 – the money will be enough.
Input	**Output**	**Comments**
20 33 0.60 0.50 10	Ivancho will have to withdraw money - he will need 11.20lv more.	For 33 guests – 6 sets of 6 portions Needed product: 6*(2 bananas), 6*(4 eggs), 6*(0.2 kilos berries) 6*(2*0.60) + 6*(4*0.60) + 6*(0.2*10.00) = 31.20 31.20 > 20 – need 11.20 lv. more.