**Problem 1. Baking Masterclass**

Peter is starting his own course, a Baking Masterclass. So, he asked you to **buy** the **needed items**. The number of **items** depends on **how many students will sign up for the course**. The educational set for one student consists of 1 package of **flour, 10 eggs and an apron**.

You will be given **Peter`s budget**, the **number of students signed** and the **prices of each item**. You have to help Peter **calculate** if the **budget** is **enough to buy all of the items**, or how much more money he needs.   
Because the **aprons** get dirty often, Peter should **buy 20% more**, **rounded up** to the next integer. Also, every **fifth package of flour is free**.

**Input / Constraints**

The input data will consist of **exactly 5 lines**:

* **budget** – **floating-point number** in **range [0.00…1,000.00]**
* **students – integer in range [0…100]**
* **price of flour** for a **package – floating-point number** in **range [0.00…100.00]**
* **price of egg** for a **single egg – floating-point number** in **range [0.00…100.00]**
* **price of apron** for a **single** **apron – floating-point number** in **range [0.00…100.00]**

The **input data will always be valid**. **There is no need to check it explicitly**.   
\* If you are using JavaScript, you receive the input as an array with 5 elements: **[budget, students, flour, egg, apron]**

**Output**

The output should be printed on the console.

* If the calculated price of the items **is less or equal to the budget**:
* "**Items purchased for {the cost of the items}$.**"
* If the calculated price is more than the budget:
* "**{neededMoney}$ more needed.**"
* **All prices** must be **rounded to two digits after the decimal point.**

**Examples**

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| 50  2  1.0  0.10  10.0 | Items purchased for 34.00$. | Needed items for 2 students :  apronPrice \* (students + 20%) + eggPrice \* 10 \* (students) + flourPrice \* (students - freePackages)  10 \* (3) + 0.10 \* 10 \* (2) + 1 \* (2) = 34.00  34.00 <= 50 – the budget is enough. |
| **Input** | **Output** | **Comments** |
| 100  25  4.0  1.0  6.0 | 410.00$ more needed. | Needed items for 25 students:  6 \* 30 + 10 \* 25 + 4 \* 20 = 510.00  510 > 100 – need 410$ more. |

*...* *36 Uses for baking soda, I love baking soda ...*