

Biscuits Factory

Create a program that **calculates** how many biscuits your factory can make for a month (**30 days**) and the **percentage** of production compared to another **factory** production.

First, you will **receive** the biscuits produced **per day (per worker)**. After that, you will **receive** the count of the **workers** in your factory. Last, you will receive the **number of biscuits** that the **competing factory produces for 30 days**.

You need to **calculate** the production of your factory for **30 days**. Then you have to **calculate how much more or fewer** biscuits you produce **compared** to the other factory (**in percentage**). There will be no case where the factories will produce **the same amount** of biscuits.

Every **third day** the workers produce only **75%** of the usual production. Keep in mind that there can be only a **whole biscuit** after making calculations **for each day** – format them to the **lower number**.

In the end, print the amount of **biscuits produced** for **30 days** in the following format:

"You have produced {countBiscuits} biscuits for the past month."

Then print the percentage of the difference, **formatted** to the **2nd decimal place**, in the following format:

If your production is **bigger** than the other factory:

"You produce {percentage} percent more biscuits."

If not:

"You produce {percentage} percent less biscuits."

Input

- On the **first line** you will receive the **amount of biscuits** a worker produce a day – an integer number in the range [1...200]
- On the **second line** you will receive the **count of the workers** in your factory – an integer number in the range [1...1000]
- On the **third line** you will receive the **amount of biscuits** that the competing factory produces for **30 days** – an integer number in the range[1...2000]

NOTE: The input will always be in the right format.

Output

- In the end print the amount of biscuits produced for 30 days and the **percentage of the difference formatted to the 2nd decimal place** in the format described above.

Constraints

- Percentage **can be over 100%**.
- There will be no case where the factories will produce **the same amount** of biscuits.

Examples

Input	Output
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78 8 16000	You have produced 17160 biscuits for the past month. You produce 7.25 percent more biscuits.
Comments	
-78 biscuits a day -8 employees -17160 biscuit production your factory (keep in mind every third day the workers produce only 75% of the usual production) -17160 - 16000 = 1160 - difference between your and the other factory production -1160/16000 * 100 = 7.25% more biscuits.	
65 12 26000	You have produced 21450 biscuits for the past month. You produce 17.50 percent less biscuits.
Comments	
-65 biscuits a day -12 employees -21450 biscuit production your factory -26000 - 21450 = 4550 - difference between your and the other factory production -4550/26000 * 100 = 17.50% more biscuits.	