### Problem 1. Experience Gaining

*Write a program, that helps a player figure how many battles he will need to play in a battle video game, in order to unlock the next tank in the line.*

On **the first line** you will **receive the amount of experience** that is needed to unlock the tank. On **the second line** you will **receive the count of battles**. On **the** **next lines,** you will receive the experience the player can gain in every battle.

Calculate if he **can unlock** the tank. Keep in mind that he **gets 15%** more experience for every **third battle** and **10% less** for every **fifth battle**. You also need to **stop the program** as soon as he **collects the needed experience**.

If he managed to gather the experience, **print** **how many battles it took him** in the following format:

* "**Player successfully collected his needed experience for {battleCount} battles."**

If he was not able to do it, **print** the following message:

* **"Player was not able to collect the needed experience, {neededExperience} more needed."**

**Format** the needed experience to **the second decimal place**.

### Input

* On the **first line** you will receive the **needed experience** amount – a **real number** in the range [0.0….400000.0]
* On the **second line** you will receive the **count of battles** – an **integer number** in the range

[0….500]

* On the **next lines** you will receive the **experience earned per battle** – a **real number** in the range

[0.0….5000.0]

### Output

* If he **managed to gather** the experience**:**
  + **"Player successfully collected his needed experience for {battleCount} battles."**
* If he was **not able** to do it**:**
  + **"****Player was not able to collect the needed experience, {neededExperience} more needed."**

**NOTE: Format** the needed experience to **the second decimal place**.

### Examples

|  |  |
| --- | --- |
| **Input** | **Output** |
| 500  5  50  100  200  100  30 | Player successfully collected his needed experience for 5 battles. |
| **Comments** | |
| The first line is the amount of the wanted experience. – **"500"**  The second line is the expected battles for which he has to collect the experience. – **"5"**  After that is the experience received for every battle:  **50 + 100 + (200 + (200 \* 15 %)) + 100 + (30 – (30 \* 10 %)) = 507**  So on the console is printed :  **"Player successfully collected his needed experience for 5 battles."** | |
| **Input** | **Output** |
| 500  5  50  100  200  100  20 | Player was not able to collect the needed experience, 2.00 more needed. |
| **Input** | **Output** |
| 400  5  50  100  200  100  20 | Player successfully collected his needed experience for 4 battles. |