# Problem 1 - Spring Vacation



A group of friends decides to go on a trip for a few days during spring vacation. They have a certain **budget**. Your task is to **calculate their expenses** during the trip and find out if they will have **enough money to finish the vacation**.

Create a program that calculates traveling expenses by entering the following information:

* **Days of the vacation**
* **Budget** **for the whole group**
* **The number of people**
* **Price for fuel per kilometer - it's the price for fuel** that their car consumes **per kilometer**
* **Food expenses per person for a day**
* **Hotel room (accommodation) price for one night** **per person**

Before starting the trip, the group pays the **total price** for **food** and **accommodation**. If the group **is larger than 10**, it receives a **25% discount** on the **accommodation expenses**.

**Every day**, they **travel** some **distance,** and you should **calculate the expenses** for the **traveled kilometers**.

At the end of every **third** and every **fifth** day, they have some additional expenses, which are **40% of the current value of the expenses**.

At the end of every **seventh** day, they **receive** a small amount of money for their expenses - equal to the **result** of the calculation **currentExpenses / numberOfPeople**.

If the **expenses** **exceed the budget at some point**, stop calculating and print the following message:

"Not enough money to continue the trip. **You need {money}$ more.**"

If the **budget is enough**:

"You have reached the destination. You have {money}$ budget left."

**Print** the result formatted **2 digits** after the decimal separator.

**Note:** We accept that the days of the vacations to be equal to the number of nights in the hotel.

### Input

* **On the 1st line**, you are going to receive the **days** of the trip - **an integer** in the range **[1…20].**
* **On the 2nd line** - the **budget** - a **real** number in the range **[0.00 - 100000.00].**
* **On the 3rd line** - the number of **people** - an **integer** in the range **[1 - 20].**
* **On the 4th line** - the **price** for fuel per kilometer - a **real** number in the range **[0.00 - 2.00].**
* **On the 5th line** - **food expenses** per person for a day - a **real** number in the range **[0.00 - 50.00].**
* **On the 6th line** - the room's **price** for a night per person - **a real** number in the range **[0.00 - 1000.00].**
* On the next **n** lines - one for each of the days - the **traveled** **distance** in kilometers per day - a **real** number in the range **[0.00 - 1000.00].**

### Output

* Print the result formatted **2 digits** after the decimal separator.

### **Examples**

|  |  |  |
| --- | --- | --- |
| **Input** | **Output** | **Comments** |
| **7**  **12000**  **5**  **1.5**  **10**  **20**  512  318  202  154  222  108  123 | You have reached the destination. You have 5083.48$ budget left. | Days of the vacation = 7, the budget = 12000, the number of people = 5, the consumed fuel per kilometer = 1.50, the food expenses = 10, and the room's price = 20.  Total **food and** **accommodation** expenses: **350 + 700 = 1050**  On the **1st day**, expenses are: **1050 +** **512 \* 1.5 = 1818**  On the **2nd day**, expenses are: **1818 + 477 = 2295**  On every **3rd**  and **5th** day, the group has **additional** expenses:  On the **3rd day,** expenses are **2598 + 40% = 3637.2**  On the **5th day,** expenses are **4201.20 + 40% = 5881.68**  On the **6th day,** expenses are **6043.68 + 40% = 8461.15**  On the **7th** **day**, they **receive** **money**: **8645.652 / 5 = 1729.13**  The **total** **expenses** are **6916.52**, so the budget is enough. |
| **10**  **20500**  **11**  **1.2**  **8**  **13**  100  150  500  400  600  130  300  350  200  300 | Not enough money to continue the trip. You need 465.79$ more. |  |