

Spring Vacation Trip

A group of friends decide to go to 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 are going to have enough money to finish the vacation.

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

- **Days of the vacation**
- **Budget** - its for the whole group
- **The count of people**
- **Fuel per kilometer** – the price for fuel that their car consumes **per kilometer**
- **Food expenses per person**
- **Hotel room price for one night** – again, for **one person**

If the group **is bigger than 10**, they receive a **25% discount** from the **total hotel expenses**.

Every day, they **travel** some **distance** and you have to **calculate the expenses** for the **travelled kilometers**.

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

Every **seventh** day, their expenses are reduced, because they **withdraw (receive)** a small amount of money – you can calculate it by **dividing the amount of the current expenses** by the **group of people**.

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

"Not enough money to continue the trip"

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.

Input / Constraints

- **On the 1st line**, you are going to receive the days of the trip – **an integer** in the range **[1...100]**
- **On the 2nd line** – the budget – **a real number** in the range **[0.00 – 1000000.00]**
- **On the 3rd line** - the group of people – **an integer** in the rang **[1 - 50]**
- **On the 4th line** – the price for fuel per kilometer – **a real number** **[0.00 – 20.00]**
- **On the 5th line** – food expenses per person for a day – **a real number** **[0.00 – 50.00]**
- **On the 6th line** – the price for a room for one night per person – **a real number** **[0.00 – 1000.00]**
- On the next **n** lines – one for each of the days – the **travelled distance** in kilometers per day– **a real number** in the range **[0.00 - 1000]**

Output

- **"Not enough money to continue the trip. You need {money}\$ more."** – if the budget is not enough
- **"You have reached the destination. You have {money}\$ budget left."** – if it's enough.

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.	<p>We receive the days of the vacation, the budget, the group, the consumed fuel per kilometer, the food expenses and the price for a hotel room for one night. We must calculate the food expenses: $10 * 5 * 7 = 350$</p> <p>And the price for the hotel for all of the nights:</p> $20 * 5 * 7 = 700$ <p>The current expenses are 1050. For each day, we have to calculate the consumed fuel – $\{\text{travelledDistance}\} * 1.5$</p> <p>On every 3rd and 5th day we add the additional expenses:</p> $0.4 * \{\text{currentExpenses}\}$ <p>On every 7th day, they receive some money:</p> $\{\text{currentExpense}\} / \{\text{groupOfPeople}\}$ <p>After we have added the fuel expenses for each day and made the other calculations, the expenses have reached 8645.652. When we divide them by the group (5), the result is 1729.1304, so we have to reduce the expenses by that sum. The expenses become 6916.5216. The budget is enough, so the result is:</p> <p>"You have reached the destination. You have 5083.48\$ budget left."</p>
10 20500 11 1.2 8 13 100 150 500 400 600	Not enough money to continue the trip. You need 465.79\$ more.	

130		
300		
350		
200		
300		