

Santa's Cookies

You need to make cookies for Santa and his dwarfs.

You will receive **the amount of batches** – **n** that you need to bake. **For every batch** you will receive ingredients: **flour**, **sugar** and **cocoa** in grams, each on a new line. You need to calculate how many boxes of cookies you get for every batch with the given ingredients and total boxes of cookies for all batches. To calculate the number of **boxes per batch** you need to divide **total cookies per bake** by **cookies per box** (see the table below). To get the **total cookies per bake** use the following formula and round the result to the nearest lower number:

$$(\{cup\} + \{smallSpoon\} + \{bigSpoon\}) * \min \text{ from}(\{flourCups\}, \{sugarSpoons\}, \{cocoaSpoons\}) / singleCookieGrams$$

To get the **flourCups** divide **flour** by **cups**.

To get the **sugarSpoons** divide **sugar** by **bigSpoon**.

And for the **cocoaSpoons** divide **cocoa** by **smallSpoon**.

The **cups** and the **spoons** must be **integer** numbers.

(see the table below)

If **flourCups**, **sugarSpoons** or **cocoaSpoons** for a single bake are not enough (≤ 0), print the following message:
"Ingredients are not enough for a box of cookies."

Otherwise calculate the cookies and print the number of boxes you get for the current batch:

"Boxes of cookies: {boxes of cookies per current bake}"

Use the following table for calculations:

Item	Grams
Single cookie Grams	25
Cup	140
Small Spoon	10
Big Spoon	20
Cookies per Box	5

When you finish baking, pack the all the cookies in boxes and send them to Santa and his dwarfs and print the total number of boxes on the console.

"Total boxes: {totalBoxes for all bakes}"

Input

The input data should be read from the console. It will consist of:

- Amount of batches - integer number in range [0...1,000,000,000]
For every batch:
- Amount of flour in grams – integer number in range [0...1,000]
- Amount of sugar in grams – integer number in range [0...1,000]

- Amount of cocoa in grams – integer number in range [0...1,000]

The input data will always be valid and in the format described. There is no need to check it explicitly.

Output

The output should be printed on the console.

- If the ingredients for current bake are not enough:
"Ingredients are not enough for a box of cookies."
- If the ingredients for current bake are enough:
"Boxes of cookies: {boxes of cookies per current bake}."
- On the last line print:
"Total boxes: {totalBoxes for all bakes}"

Examples

Input	Output
2 200 300 500 100 200 50	Boxes of cookies: 1 Ingredients are not enough for a box of cookies. Total boxes: 1
1 1400 200 100	Boxes of cookies: 13 Total boxes: 13