Problem 1. Party Profit

As a young adventurer, you travel with your party around the world, seeking for gold and glory. But you need to split the profit among your companions.

You will receive a **party size**. After that you receive the **days** of the adventure.

Every day, you are **earning 50 coins**, but you also spent **2 coin per companion** for food.

Every **3rd (third)** day, you have a motivational party, spending **3 coins per companion** for drinking water.

Every **5th (fifth)** day you slay a boss monster and you **gain 20 coins per companion**. But if you have a motivational party the same day, you **spent additional 2 coins per companion**.

Every **10th (tenth)** day **at the start of the day**, **2 (two)** of your companions **leave**, but every **15th (fifteenth) day 5 (five) new** companions are joined **at the beginning of the day**.

You have to calculate how much coins gets each companion at the end of the adventure.

Input / Constraints

The input will consist of **exactly 2 lines**:

- party size – **integer in range [1…100]**
- days **– integer in range [1…100]**

Output

Print the following message: **`"{companionsCount} companions received {coins} coins each."`**

You cannot split a coin, so take the integral part (round down the coins to integer number).

Examples

Input	Output
3 5	3 companions received 90 coins each.
Input	**Output**
15 30	19 companions received 102 coins each.

...Each companion has a distinct personality and values...