

# COCI '09 Contest 2 #1 Faktor

---

**Time limit:** 1.0s    **Memory limit:** 32M

---

Impact factor of a scientific journal is a measure reflecting the average number of citations to articles published in science journals. For this task we are using a simplified formula for calculating the impact factor:

$$\frac{\text{Total sum of all citations articles published in the journal received}}{\text{Total number of articles published}}$$

**Rounding is always performed up.** For example the impact factor of the "Journal for ore research and time wasting" that published 38 articles quoted 894 times is  $894/38 = 23.53$  rounding up to 24.

You are the editor of one scientific journal. You know how many articles you are going to publish and the owners are pushing you to reach a specific impact factor. You are wondering how many scientists you will have to bribe to cite your article to meet the owners' demands. Since money is tight you want to bribe the **minimal** amount of scientists.

## Input

---

First and only line of input will contain 2 integers,  $A$  ( $1 \leq A \leq 100$ ), number of articles you plan to publish and  $I$  ( $1 \leq I \leq 100$ ) impact factor the owners require.

## Output

---

First and only line of output should contain one integer, the **minimal** number of scientists you need to bribe.

## Sample Input 1

---

```
38 24
```

## Sample Output 1

---

```
875
```

## Sample Input 2

---

```
1 100
```

## Sample Output 2

---

100

## Sample Input 3

---

10 10

## Sample Output 3

---

91