Mock CCC '15 J2 - Lowest Exam Mark

Time limit: 1.0s   **Memory limit:** 64M

2015 Mock CCC by Alex and Timothy

It's midterm examination season! The most frequently asked question in high schools across Canada is, of course, "what is the lowest mark I have to get on the exam to end up with $X\%$ overall?"

Berta currently has exactly P percent in her class and prepares to write an exam that will be worth W percent of her overall mark afterwards. Her goal is to reach a mark of Q percent after the exam. Note that after inputting Berta's exam mark, her teacher will round her overall mark (half-up) to the nearest percent to be displayed. What is the minimum mark that she must obtain on the exam to have an overall mark that rounds to Q percent or over?

Input Specification

Line 1 will contain P, the percentage mark she currently has.
Line 2 will contain Q, the percentage mark she would like to have.
Line 3 will contain W, the weight of the exam.
The input will only contain integers between 0 and 100, inclusive.

Output Specification

Output a single integer, the minimum integer percentage that must be obtained on the exam to reach a final mark that rounds to Q percent or greater. If this is not possible, Berta knows that the mark is probably not going to look good on her report card. In this case, you should output only the line `DROP THE COURSE`.

Sample Input 1

```
85
90
30
```

Sample Output 1

```
100
```

Explanation for Sample 1

Berta has an 85% and prepares to take her midterm exam that will be worth 30% of her final mark. Assuming she gets perfect on her exam, her overall mark will be 89.5% afterwards, which just barely rounds up to a 90% for her final mark.

Sample Input 2

```
36
50
20
```

Sample Output 2

```
DROP THE COURSE
```

Explanation for Sample 2

Here, Berta has a 36% and just wants to pass the course with a 50%. However, even with a perfect exam, she can only end up with 48.8% overall.