# **Bovine Bones**

Rob Kolstad, 2008 Points: 70

Bessie rolls and rolls and rolls trying to figure out which three-dice sum appears most often.

Given the number of sides on each of the three dice, determine which three-dice sum appears most frequently. If more than one sum can appear most frequently, report the smallest such sum.

## Input

Line 1: Three space-separated integers: S1, S2, and S3

#### **Output**

• Line 1: The smallest integer sum that appears most frequently when the dice are rolled in every possible combination.

## **Example**

Input:

323

**Output:** 

5

# **Output details**

Here are all the possible outcomes.

```
1 1 1 -> 3 1 2 1 -> 4 2 1 1 -> 4 2 2 1 -> 5 3 1 1 -> 5 3 2 1 -> 6 1 1 2 -> 4 1 2 2 -> 5 2 1 2 -> 5 2 2 2 -> 6 3 1 2 -> 6 3 2 2 -> 7 1 1 3 -> 5 1 2 3 -> 6 2 1 3 -> 6 2 2 3 -> 7 3 1 3 -> 7 3 2 3 -> 8
```

Both 5 and 6 appear most frequently (five times each), so 5 is the answer.