

# GETTING AN AP

Little John has been learning about sequences of numbers and he is very excited about arithmetic progressions.

He takes three boxes and puts some chits in each of them. For deciding the number of chits, he randomly chooses a number  $n$ , and places  $n$  chits in first box,  $2*n$  chits in the second box and  $3*n$  chits in the third box. If a box contains  $x$  chits then the chits are numbered from 1 to  $x$ .

Now he randomly chooses a chit from each of the three boxes, and places them in order. (Chit from first box first, then the chit from second box and then the chit from third box). He wants to determine if the sequence so obtained forms an arithmetic progression.

Given the number  $n$  that he chooses, find the probability that the chits he draws form an arithmetic progression.

## Input

The input consists of a number of test cases. The first line of input contains  $T$ , the number of test cases.

Then  $T$  lines follow, each containing the number  $n$  that Little John has chosen.

$$1 \leq T \leq 100000$$

$$1 \leq n \leq 100000$$

## Output

The output for each test case should be of the form  $p/q$ , where  $p/q$  is an irreducible fraction denoting the probability of forming an arithmetic progression from the chits he picks.

## Example

**Input:**

2  
1  
2

**Output:**

1/3  
1/8