D. On Sum of Fractions

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input

output: standard output

Let's assume that

- v(n) is the largest prime number, that does not exceed n;
- u(n) is the smallest prime number strictly greater than n.

Find.

Input

The first line contains integer t ($1 \le t \le 500$) — the number of testscases.

Each of the following *t* lines of the input contains integer n ($2 \le n \le 10^9$).

Output

Print t lines: the i-th of them must contain the answer to the i-th test as an irreducible fraction "p/q", where p,q are integers, q > 0.

Examples

input	
2 2 3	
output	
1/6 7/30	