

It is easy to see that for every fraction in the form  $\frac{1}{k}$  ( $k > 0$ ), we can always find two positive integers  $x$  and  $y$ ,  $x \geq y$ , such that:

$$\frac{1}{k} = \frac{1}{x} + \frac{1}{y}$$

Now our question is: can you write a program that counts how many such pairs of  $x$  and  $y$  there are for any given  $k$ ?

## Input

Input contains no more than 100 lines, each giving a value of  $k$  ( $0 < k \leq 10000$ ).

## Output

For each  $k$ , output the number of corresponding  $(x, y)$  pairs, followed by a sorted list of the values of  $x$  and  $y$ , as shown in the sample output.

## Sample Input

```
2
12
```

## Sample Output

```
2
1/2 = 1/6 + 1/3
1/2 = 1/4 + 1/4
8
1/12 = 1/156 + 1/13
1/12 = 1/84 + 1/14
1/12 = 1/60 + 1/15
1/12 = 1/48 + 1/16
1/12 = 1/36 + 1/18
1/12 = 1/30 + 1/20
1/12 = 1/28 + 1/21
1/12 = 1/24 + 1/24
```