471 Magic Numbers

Write a program that finds and displays all pairs of integers s_1 and s_2 such that:

- 1. neither s_1 nor s_2 have any digits repeated; and
- 2. $s_1/s_2 = N$, where N is a given integer;

Input

The input file consist a integer at the beginning indicating the number of test case followed by a blank line. Each test case consists of one line of input containing N.

Two input are separated by a blank line.

Output

For each input the output consists of a sequence of zero or more lines each containing $s_1 / s_2 = N'$, where s_1 , s_2 and N are the integers described above. When there are two or more solutions, sort them by increasing numerator values.

Two consecutive output set will separated by a blank line.

Sample Input

1

1234567890

Sample Output

1234567890 / 1 = 1234567890 2469135780 / 2 = 1234567890 4938271560 / 4 = 1234567890 6172839450 / 5 = 1234567890 8641975230 / 7 = 1234567890 9876543120 / 8 = 1234567890