

4179 Sharp Minds

Heidi and Sammy enjoy time together. When they are not chasing sticks, taking walks, or eating cookies, they play a little game to keep their minds as sharp as their teeth.

The game is played with nine balls, each of which has a unique single digit from 1 to 9 painted on it. One of the puppies picks up to six of the balls and a positive integer k . The other puppy determines if it is possible to obtain k as the result of a valid arithmetic expression that uses each of the digits on the selected balls exactly once as an operand. If there is no such expression the puppy responds by growling.

For example, if Heidi chose the balls with the digit four and the digit three on them and selected the positive integer 12, Sammy could reply with either $3 * 4$ or $4 * 3$. On the other hand if Sammy chose the balls with the digit one and the digit five on them and selected the positive integer 100, Heidi would respond with a growl.

The puppies allow the use of parentheses and the binary operators '+', '-', '*', and '/' with the usual precedence and associativity in the expression, but they do not allow the digits on the balls to be combined to form larger numbers. So, if Heidi chose the balls with 1, 2, and 5 and selected the number 26, Sammy would growl because she could not respond with the expression $25+1$, or any other.

After a while the problems got hard enough so that the puppies seek your help — write a program to see how much growling is required.



Input

Input to your program consists of lines with one or more digits and one number, separated by white space. Each line is one problem and contains first the selected digits, and as the last item the number which should result.

Output

For each input line there is one output line which either contains a valid expression producing the desired result or the word 'GROWL', in either case without additional white space.

Note that the expressions need not be unique solutions.

Sample Input

```
4 3 12
1 2 5 26
5 2 3 10
5 6 7 9 18
```

Sample Output

```
3*4
GROWL
2+3+5
(5+7)/6*9
```