**Two Mathematicians**

**Written by Ruben Baerga**

This problem is based on a classic riddle. Solving it will help you have a clear understanding of how to write your program. Here it is:

Two Russian mathematicians meet on a plane.

“If I remember correctly, you have three sons,” says Ivan. “What are their ages today?”

“The product of their ages is thirty-six,” says Igor, “and the sum of their ages is exactly today’s date.”

“I’m sorry, Igor,” Ivan says after a minute, “but that doesn’t tell me the ages of your boys.”

“Oh, I forgot to tell you, my youngest son has red hair.”

“Ah, now it’s clear,” Ivan says. “I now know exactly how old your three sons are.”

How did Ivan figure out the ages?

You are to write a program that will determine whether it is **always** possible to figure out the ages of someone’s sons assuming that their ages add up to today’s date and you are given two numbers (1) the number of offspring and (2) the product of their ages. Just to be clear, the children aren’t necessarily Igor’s, because not everyone has a youngest son with red hair.

**Input**

Each case will be a set of two integers, line by line, with the first integer representing the number of sons and the second representing the product of their ages. The last line of the input will be two zeroes, I guess. In every case, the sum of their ages will not exceed 31.

**Output**

For each case, output “yes” if it is possible to figure out the ages of the sons, and output “no” if it is not.

**Sample Input**

2 13

2 15

4 60

5 120

7 72

3 144

8 144

0 0

**Sample Output**

yes

yes

yes

no

no

no

no