Product of two primes   P80968_en

Examen parcial d'Informàtica, FME (2014-11-17)

Write a program to tell if a given natural number is equal to the product of two different primes.

Input

Input consists of several cases, each with a natural number n between 1 and 10^9.

Output

For every n, tell if it can be obtained as the product of two different primes.

Observation

In this problem, you should not use vectors or alike.

Sample input

```
1
2
4
6
17
18
30
49
323
100000000
999999991
999999937
```

Sample output

```
1: no
2: no
4: no
6: yes
17: no
18: no
30: no
49: no
323: yes
100000000: no
999999991: yes
999999937: no
```

Problem information

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