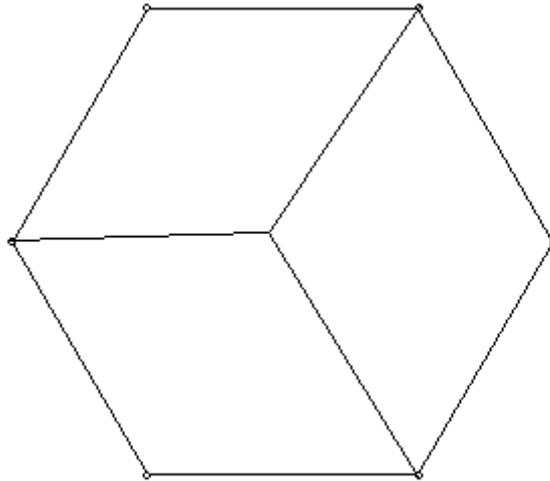# 11298   Dissecting a Hexagon

Given an integer n, determine whether it is possible to dissect a regular hexagon into n parallelograms of equal area. An example of a hexagon dissected into 3 parallelograms is given below.

Input

There is at most 800 inputs. Each input is n ($n < 1000001$)

Output

For each input, output the answer on a single line. Output '1' if it is possible to dissect a regular hexagon into n parallelograms, otherwise output '0'.

Sample Input

```
2
147
```

Sample Output

```
0
1
```