

MIDI Olympiad in Informatics 2007

Vilnius University, Lithuania



Input file

Output file

Time limit

Memory limit

reflections.in

reflections.out

1 second

16 MB

Reflections

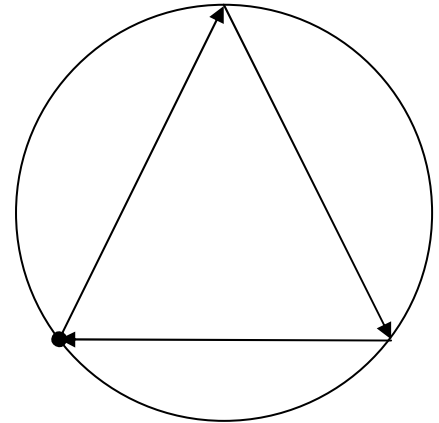
You are given a circle with reflective inner side. From a certain point on the inner side of circle, a beam of light is emitted. Naturally, a beam reflects in the inner side, example situation is pictured (point of emission is marked bold).

Apparently the number of reflection points (there are two of them in the picture) depends on the initial angle.

Your task is to find how many different ways are there to get the emitted light beam back into emission point within given reflection point bounds.

In the input file, you are provided with two numbers, A and B.

You shall only consider cases with no less than A reflection points and no more than B reflection points ($1 \leq A \leq B \leq 10^8$, $B - A \leq 10000$).



Input	Output
1 2	3
3 5	8