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SNAPE - Editorial

Problem Link: [contest](#), [practice](#)

1 Difficulty: Cakewalk

Pre-requisites: Geometry, Implementation

Problem:

We are given two numbers A and B . Our task is to determine the minimal and the maximal possible value of number C thus exists a non-obtuse triangle with the lengths of the sides equal to A , B and C .

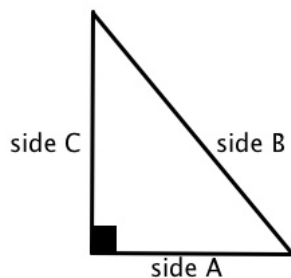
It's also guaranteed, that $A < B$.

Explanation:

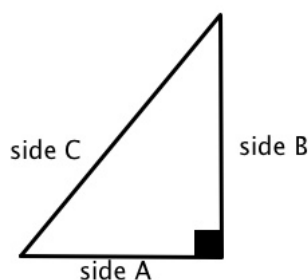
It was the easiest problem of the contest.

Since $A < B$, the only angles, that could be obtuse, are the angles between sides A and B or A and C .

So, the minimal possible value of C is reached when the angle between sides A and C is right (equals to 90 degrees).



Also, the maximal possible value of C is reached when the angle between sides A and B is right (equals to 90 degrees).



The first value $C_{\min} = \sqrt{B^2 - A^2}$;

The second value $C_{\max} = \sqrt{B^2 + A^2}$.

The total complexity is $O(1)$ per testcase.

Setter's Solution: [link](#)

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This question is marked "community wiki".

edited 21 Apr '14, 00:16



admin ♦♦

[13.2k] • 347 • 483 • 500

asked 21 Apr '14, 00:05



kostya_by ♦♦

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