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Arithmetic Progression



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Math

PROBLEM

EDITORIAL

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ANALYTICS

DISCUSSIONS

NEW

You will be given three numbers A,B,C .You can perform the following operation on these numbers any number of times.You can take any integer from A, B, C and you can add or subtract 1 from it.

Each operation cost 1sec of time(say). Now you have to determine the minimum time required to change those numbers into an Arithmetic Progression.

i.e $B-A=C-B$

Input :

First line of input contains T denoting number of test cases.

Next T lines contains space seperated integers A,B,C

Output :

For each test case, print a single line containing one integer — the minimum time require to change A,B,C into an arithmetic progression.

Constraints :

$$1 \leq T \leq 100000$$

$$-10^8 \leq A, B, C \leq 10^8$$

SAMPLE INPUT



```
5
-5 0 5
-5 7 6
-10 -100 20
1 -1 1
51 23 10
```

SAMPLE OUTPUT



?

```
0
7
105
2
8
```

Explanation

Example case 1: No operations are needed because $0 - (-5) = 5 - 0$.

Example case 2: We can obtain an arithmetic progression in seven operations by adding 1 to **A** = -5 and subtracting 1 six times from **B** = 7.

Example case 3: We should add 1 to **B** 105 times.

Time Limit: 0.5 sec(s) for each input file.

Memory Limit: 256 MB

Source Limit: 1024 KB

BEST SUBMISSION



SIMILAR PROBLEMS



CONTRIBUTORS



English ▼