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PROBLEMS SUBMIT STATUS STANDINGS CUSTOM TEST

A. X Axis

time limit per test: 2 seconds memory limit per test: 256 megabytes input: standard input output: standard output

You are given three points with integer coordinates x_1, x_2 , and x_3 on the X axis ($1 \le x_i \le 10$). You can choose any point with an integer coordinate a on the X axis. Note that the point a may coincide with x_1, x_2 , or x_3 . Let f(a) be the total distance from the given points to the point a. Find the smallest value of f(a).

The distance between points a and b is equal to |a-b|. For example, the distance between points a=5 and b=2 is 3.

Input

Each test consists of multiple test cases. The first line contains a single integer t ($1 \le t \le 10^3$) — the number of test cases. Then follows their descriptions.

The single line of each test case contains three integers x_1, x_2 , and x_3 ($1 \le x_i \le 10$) — the coordinates of the points.

Output

For each test case, output the smallest value of f(a).

Example



Note

In the first test case, the smallest value of f(a) is achieved when a=1: f(1)=|1-1|+|1-1|+|1-1|=0.

In the second test case, the smallest value of f(a) is achieved when a = 5: f(5) = |1 - 5| + |5 - 5| + |9 - 5| = 8.

In the third test case, the smallest value of f(a) is achieved when a=8: $f(8)= \lfloor 8-8 \rfloor + \lfloor 2-8 \rfloor + \lfloor 8-8 \rfloor = 6$.

In the fourth test case, the smallest value of $\mathit{f}(a)$ is achieved when a=9: $\mathit{f}(10)=|10-9|+|9-9|+|3-9|=7$.

Codeforces Round 954 (Div. 3)

Finished

→ Virtual participation

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