Problem L. Fibonacci Equation

Input file:	*standard input*
Output file:	*standard output*
Time limit:	1 second
Memory limit:	256 mebibytes

Bison Mike chose three consecutive Fibonacci numbers: F_n, F_{n+1} and F_{n+2}, shuffled them and used as A, B and C in the quadratic equation

$$Ax^2 + Bx + C = 0$$

Now Mike wants to know the number of different real root of this equation. Help him to find out the answer.

Input

First line of the input consists of three integers i, j and k ($0 \le i, j, k \le 10^9$) — indices in the Fibonacci sequence; where $A = F_i$, $B = F_j$ and $C = F_k$. It is guaranteed that i, j and k are pairwise distinct and that difference between maximum and minimum of those integers is equal to 2.

Output

Print one integer — number of different roots of the equation.

Examples

standard input	standard output
1 2 0	2
1 0 2	0

Note

Rules to build Fibonacci sequence:

$$F_0 = 0$$

$$F_1 = 1$$

$$F_i = F_{i-1} + F_{i-2}, \text{ where } i > 1$$