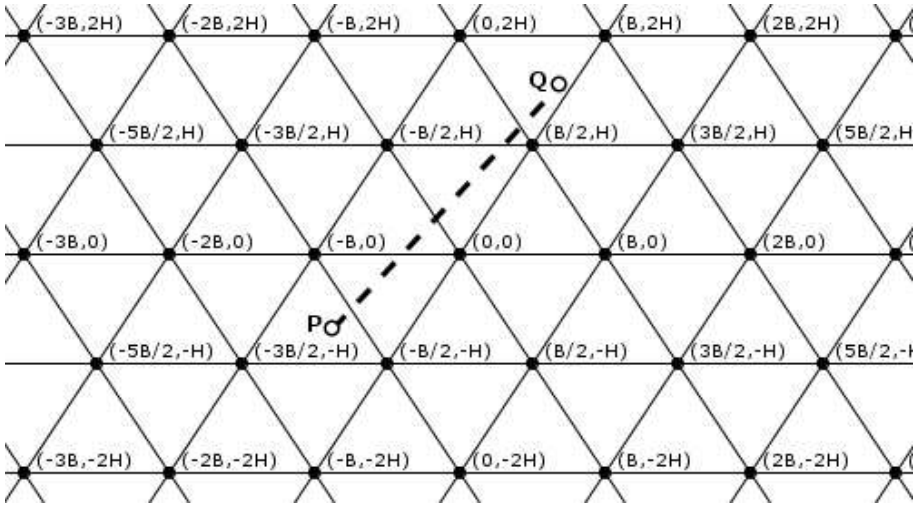
Problem G
Triangular Grid

There is an infinite grid in the Cartesian plane composed of isosceles triangles, with the following design:



A *single triangle* in this grid is a triangle with vertices on intersections of grid lines that has not other triangles inside it.

Given two points P and Q in the Cartesian plane you must determine how many single triangles are intersected by the segment $\overline{PQ}$. A segment intersects a polygon if and only if there exists one point of the segment that lies inside the polygon (excluding its boundary).

Note that the segment $\overline{PQ}$ in the example intersects exactly six single triangles.

Input

The problem input consists of several cases, each one defined in a line that contains six integer values B, H, x_1, y_1, x_2 and y_2 ($1 \leq B \leq 200$, $2 \leq H \leq 200$, $-1000 \leq x_1, y_1, x_2, y_2 \leq 1000$), where:

- B is the length of the base of all isosceles single triangles of the grid.
- H is the height of all isosceles single triangles of the grid.
- (x_1, y_1) is the point P, that defines the first extreme of the segment.
- (x_2, y_2) is the point Q, that defines the second extreme of the segment.

You can suppose that neither P nor Q lie in the boundary of any single triangle, and that $P \neq Q$.

The end of the input is specified by a line with the string "`0 0 0 0 0 0`".

The input must be read from standard input.

Output

For each case in the input, print one line with the number of single triangles on the grid that are intersected by the segment $\overline{PQ}$.

The output must be written to standard output.

Sample Input	**Sample output**
100 120 -20 -100 160 160 10 8 5 5 5 4 10 8 5 5 10 5 10 8 5 5 10 10 0 0 0 0 0 0	6 1 2 3