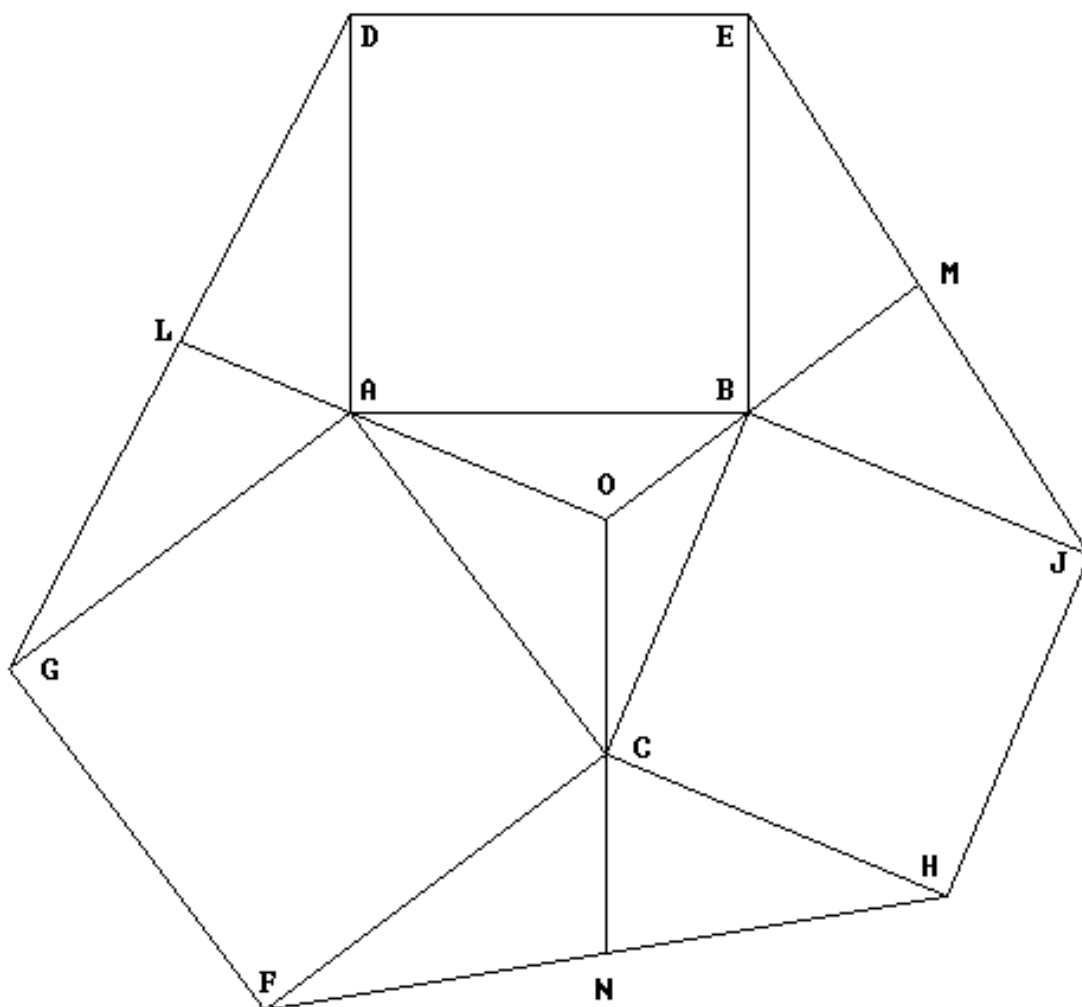


Problem B EXOCENTER OF A TRIANGLE

Given a triangle ABC , the *Extriangles* of ABC are constructed as follows:
On each side of ABC , construct a square ($ABDE$, $BCHJ$ and $ACFG$ in the figure below).
Connect adjacent square corners to form the three *Extriangles* (AGD , BEJ and CFH in the figure).
The *Exomedians* of ABC are the medians of the *Extriangles*, which pass through vertices of the original triangle, extended into the original triangle (LAO , MBO and NCO in the figure). As the figure indicates, the three *Exomedians* intersect at a common point called the *Exocenter* (point O in the figure).
This problem is to write a program to compute the *Exocenters* of triangles.



Input (filename :B.in)

The first line of the input consists of a positive integer n , which is the number of datasets that follow. Each dataset consists of 3 lines; each line contains two floating point values which represent the (two -dimensional) coordinate of one vertex of a triangle. So, there are total of $(n*3) + 1$ lines of input. Note: All input triangles will be strongly non-degenerate in that no vertex will be within one unit of the line through the other two vertices.

Output(standard output)

For each dataset you must print out the coordinates of the *Exocenter* of the input triangle correct to four decimal places.

Sample input(B.in)	Output for the Sample Input
2 0.0 0.0 9.0 12.0 14.0 0.0 3.0 4.0 13.0 19.0 2.0 -10.0	9.0000 3.7500 -48.0040 23.3600