

Russell's Telescope

Filename: RUSSELL

One day, Russell Ussuef was wandering in space, trying to decide where to set up his portable Hubble space telescope. However, Russell's favorite spot was near Interspace 95 where a new yield sign had just been put up. Russell was worried. Would this great galactic yield sign block his vision?

The Problem:

For several sets of data, determine if the great galactic yield sign blocks Russell's view. The great galactic yield sign is triangular in shape.

The Input:

The data file will have several data sets in it. Each set of data will contain five points (in three-dimensional space): The three corners of the yield sign, the position of Russell's telescope, and the position Russell wants to look at. The points will be represented as three real numbers on a line. Thus, each data set will consist of five lines, each consisting of three real numbers. The first three lines are the corners of the great galactic yield sign, the fourth is the position of Russell's telescope, and the fifth is the position Russell wants to look at. Data sets will follow after each other with no break.

The Output:

For each data set, print and clearly label the corners of the great galactic yield sign, the position of Russell's telescope, and the position he wants to look at. Then, print either the message **Yes, Russell can see the position** or **No, Russell cannot see the position**, whichever is correct. Note that Russell cannot see the position if the line between his telescope and the point he's looking at intersects the triangle of the great galactic yield sign.

Sample Input:

-1.0 1.0 0.0
1.0 1.0 0.0
0.0 -1.0 0.0
0.0 0.0 1.0
0.0 0.0 -1.0
0.0 0.0 0.0
1.0 2.0 1.0
1.0 0.0 1.0
0.0 1.0 1.0
0.0 1.0 -2.0

Sample Output:

Yield sign at: (-1.0, 1.0, 0.0) (1.0, 1.0, 0.0) (0.0, -1.0, 0.0)
Russell at (0.0, 0.0, 1.0) looking at (0.0, 0.0, -1.0)
No, Russell cannot see the position

Yield sign at: (0.0, 0.0, 0.0) (1.0, 2.0, 1.0) (1.0, 0.0, 1.0)
Russell at (0.0, 1.0, 1.0) looking at (0.0, 1.0, -2.0)
Yes, Russell can see the position