

## Problem L. Three Balls

Input file:            *standard input*  
Output file:           *standard output*  
Time limit:            2 seconds  
Memory limit:         512 mebibytes

Do you like problems with short and clear statement? You are given three balls in three-dimensional space. The balls do not intersect and have different radii. Find the volume of their convex hull.

### Input

The input consists of three lines, each line describes one ball.

Each line contains four integers  $x_k, y_k, z_k, r_k$ : the coordinates of the center of the  $k$ -th ball and its radius ( $1 \leq r_k \leq 100, 0 \leq x_k, y_k, z_k \leq 100$ ).

It is guaranteed that the balls do not intersect and do not touch. In addition,  $r_1 < r_2 < r_3$ .

### Output

Print the volume of the convex hull. The output will be accepted if it has absolute or relative error at most  $10^{-7}$ .

### Example

standard input	standard output
10 0 0 1 0 10 0 2 0 0 10 3	691.832383333484585819