Class 2 - Find the Torsional Angle

You are given four points A, B, C and D in a 3-dimensional Cartesian coordinate system. You are required to print the angle between the plane made by the points A, B, C and B, C, D in degrees(**not** radians). Let the angle be *PHI*.

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Cos(PHI) = (X, Y)/|X||Y| where $X = AB \times BC$ and $Y = BC \times CD$.

Here, X.Y means the dot product of X and Y, and $AB \times BC$ means the cross product of vectors AB and BC. Also, AB = B - A.

Input Format

One line of input containing the space separated floating number values of the X, Y and Z coordinates of a point.

Output Format

Output the angle correct up to two decimal places.

Sample Input

Sample Output

8.19