

# 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\$.

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

Here,  $X \cdot Y$  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

```
0 4 5
1 7 6
0 5 9
1 7 2
```

## Sample Output

```
8.19
```