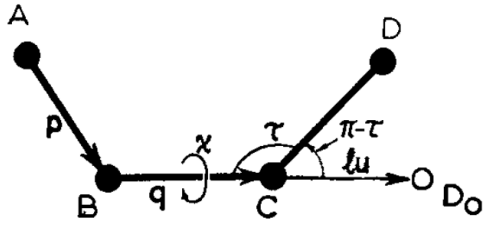
Tutorial BMSID (22nd Sep 2018)

Given :
Co-ordinates of Atoms A,B & C :
11.453 17.324 11.284
13.744 18.237 10.881
12.724 17.274 10.444

length(CD) : 1.5
angle(BCD) : 110.2
torsion(ABCD) : 178.0



Answer should be :
co-ordinates of D : 13.302 15.862 10.435

My Outputs

co-ordinates of D : 13.20364768, 16.52338303, 9.2371395

Verification using my output gives following results:
length(CD) : 1.49999999968
angle(BCD) : 110.199999965
torsion(ABCD) : 178.000000267

Unit vector along Direction BC : -0.69422493 -0.65543 -0.29742774
and its Direction Cosines are : -0.694224927090536, -0.6554300046942986, -0.29742773837114106

Unit Vector Normal to plane A-B-C : -0.38226111 0.68588494 -0.61922395
and its Direction Cosines are : -0.38226110833688237, 0.6858849381163961, -0.6192239471452359