

MATHEMATICS ANSWERS

Level Three

Traversing

1. Bearing BC = $162^{\circ}28'$
Bearing CD = $274^{\circ}50'$
2. $\angle A = 92^{\circ}54'$
 $\angle D = 104^{\circ}40'$
3. $\angle B = 90^{\circ}12'55''$
 $\angle C = 81^{\circ}11'44''$
4. If the coordinates of A = 1000.00mN and 1000.00mE , then we have:

	Distance	Bearing (rad.)	ΔN	ΔE	Northings	Easting
A-B	38.95	1.416626	5.981	38.488	1005.981	1038.488
B-C	37.55	1.174607	14.491	34.641	1020.472	1073.129
C-D	59.68	2.075487	-28.858	52.239	991.614	1125.368
D-E	63.03	3.346378	-61.713	-12.818	929.901	1112.550
E-F	36.756	4.818854	3.906	-36.548	933.807	1076.002
F-G	36.756	4.818854	3.906	-36.548	937.713	1039.454
G-H	36.756	4.818854	3.906	-36.548	941.619	1002.906
H-A	58.453	6.233443	58.381	-2.906	1000.00	1000.00

B-G	-68.268	0.966
Bearing	3.127441	179 11 21
Distance	68.275	
C - F	-86.665	2.873
Bearing	3.108456	178 06 05
Distance	86.713	