

**Exercise N°1**

We aim to determine the rectangular coordinates of points (1, 2, 3, 4) from the Cartesian coordinates presented in the table:

	Cartesian Coordinates		Rectangular Coordinates	
POINTS	X(m)	Y(m)	Dist (m)	Azimuth (gon)
St A	0.00	0.00	/	/
1	0.00	12.72		
2	2.36	12.72		
3	8.63	13.17		
4	2.07	3.36		

Complete the table.

**Exercise N°2**

To determine the elevation of the intermediate points (I1, I2, I3), a leveling survey was carried out between the starting point A and the endpoint B. Given the following data:

Starting elevation: **124,968(m)**, Endpoint elevation: **125,878(m)**, Tolerance=**18** mm

station	Target Point	Backsight Readings (mm)			Foresight Readings (mm)			Dist. Dh(m)	Elevation Difference $\Delta H$ (mm)		Adjust (mm)	Elevation (m)
		S''' m1''	n'' m''	S'' m2''	S''' m1''	n'' m''	S'' m2''		+	-		
St1	A	1 973	1 925	1 878	/	/	/	/	/	/	/	124,968
St2	I1	1 536	1 524	1 508	1 343	1 296	1 249					
St3	I2	1 866	1 836	1 806	1 388	1 377	1 365					
St4	I3	1 016	0 988	0 955	1 076	1 047	1 017					
St5	B	/	/	/	1 667	1 638	1 608					
												125,878

Under these conditions, you are asked to complete the table.