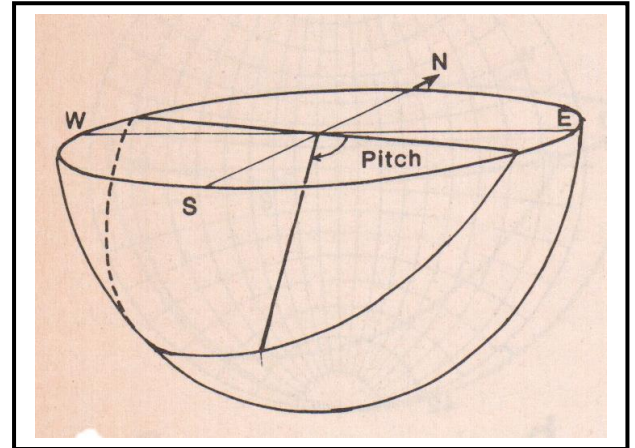


Plotting a Line on a plane & determination of the rake (Pitch) angle using stereographic projection

Rake (pitch) angle: is the angle between a Line in a plane and horizontal (strike) of the plane, measured in the same plane that containing that line.



A): Determination of the rake of the line from bearing and plunge of a line:

Exercise (1): Plot the following lines on a plane then determine the rake angle of the line on plane:

No.	Attitude of the planes	Attitude of the lines	Rake angle
1	305/45 SW	168 / 37	
2	68/ 82	N11W/ 59	
3	N40E/ 32NW	N23E/11	

B): Determination of bearing and plunge of a line from rake angle:

Exercise (2): determine the bearing and plunge for following lines on planes given Rake (Pitch) angle:

No.	Attitude of the planes	Rake angle	Attitude
1	320/ 73	57SW	
2	327/ 17SW	26NW	
3	S86W/51SE	69NE	