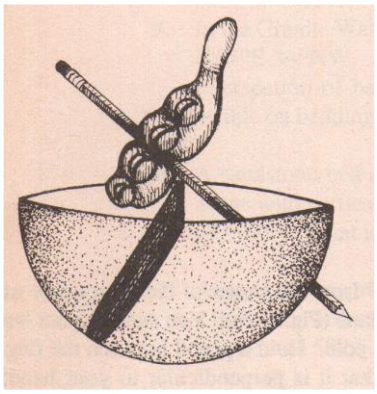
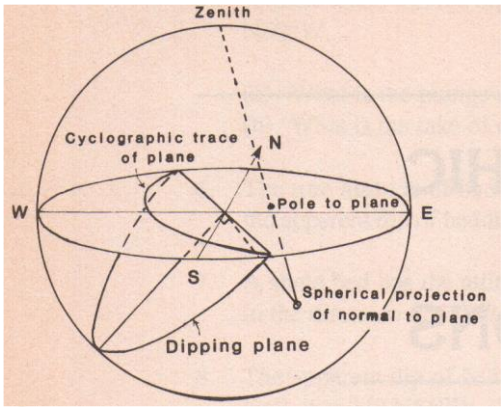
I) Pole to a plane:

Pole: is the horizontal projection (i.e stereonet) of a perpendicular line to a plane on lower hemisphere.





Ex.1) Draw poles of these planes by the stereographic projection:

1- 060/ 30SE 2- N38W/06 SW 3- 157/ 85 NE 4-S40W/ 90 SE 5-180/65 6-360/33

The plotting procedure

1- Maintaining the overlay and stereonet in the position established in Step 3 (in previous Lab), measure 90◦ from the already plotted great circle along the East-West diameter towards West and hence establish the pole to the bedding plane.

Note ***that the great circle representing the bedding plane bows out towards the direction of dip. The great circle and dip direction of a plane always have this bow-and-arrow relationship. The pole lies in the opposite quadrant to the dip direction.***

II) Finding angle between two lines and the attitude of plane containing two lines:

Ex.2) Find the angle between these two lines and the attitude of plane that contains these two lines:

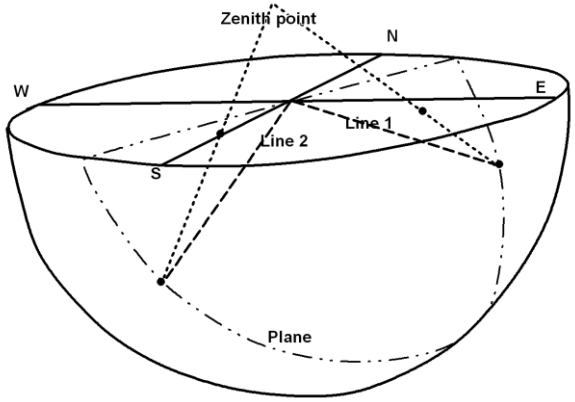
1-038/40 and 116/50

2-N76W/32 and S78W/50

3-046/35 and 172/30

4-252/25 and S73E/60

5- S60E/34 and 196/72



The plotting procedure

1- Plot first and second lines. The method is explained (in previous Lab).

2- Rotate the tracing paper until the points representing the two lines come to lie on the same great circle on the net.

3- Draw this great circle on the tracing paper. This great circle on the stereogram represents the sought plane.