

SECANT CONES

1. Given a sphere of radius 10 and a projection cone that cuts the sphere at latitudes  $30^\circ$  North and  $60^\circ$  North. Use  $0^\circ$  longitude as the central meridian and its intersection with the projection of the equator as the origin for the rectangular coordinates.

On the developed cone, plot the location of the following points and compute their rectangular coordinates:

$45^\circ$  N,  $30^\circ$  E      and       $70^\circ$  N,  $45^\circ$  W

2. Given a sphere of radius 10 and a projection cone that cuts the sphere at latitudes  $30^\circ$  North and  $70^\circ$  North. Use  $0^\circ$  longitude as the central meridian and its intersection with the projection of the equator as the origin for the rectangular coordinates.

On the developed cone, plot the location of the following points and compute their rectangular coordinates:

$45^\circ$  N,  $100^\circ$  E      and       $55^\circ$  N,  $120^\circ$  W