1. The angular distance between the zenith and the celestial equator (CE) (measured along the meridian) is equivalent to:
   a) declination  
   b) altitude  
   c) longitude  
   d) latitude

2. Using the diagram at upper right, the zenith distance of the object (star) is approximately how many degrees?
   a) 90°  
   b) 60°  
   c) 45°  
   d) 30°

3. The zenith distance of the North Celestial Pole (NCP) is measured to be 35°. The latitude of the location is:

4. The altitude of an object on the CE when it is due south is measured to be 65°. The latitude of that location is:

5. A transiting object (on meridian) that resides on the celestial equator has a zenith distance measured to be 40°. The latitude of the location is:

6. The sun’s midday altitude on September 21 (Autumnal Equinox) is measured to be 30°. The latitude of the location is:

**BONUS QUESTION** (no penalty if wrong)

The altitude of a transiting star is measured to be 43°. The star has a declination of -15°. What is the latitude of the location?