

AST101 Take-home #9

Due November 20

Name: _____

1. The angular distance between the zenith and the celestial equator (CE) (measured along the meridian) is equivalent to:

a) Altitude of the NCP
b) Zenith distance of the NCP
c) Altitude of the CE
d) None of the above

2. Using the diagram at 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 20° . The latitude of the location is:

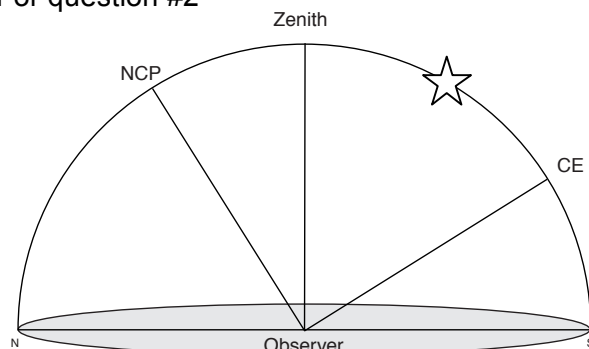
4. The altitude of an object on the CE when it is due south is measured to be 50° . The latitude of that location is:

5. A transiting object (on meridian) that resides on the celestial equator has a zenith distance measured to be 25° . The latitude of the location is:

6. The sun's midday altitude on March 21 (Vernal Equinox) is measured to be 30° . The latitude of the location is:

7. The altitude of a transiting star is measured to be 30° . The star has a declination of -15° . What is the latitude of the location?

For question #2



Use diagrams below for scratch, as needed.

