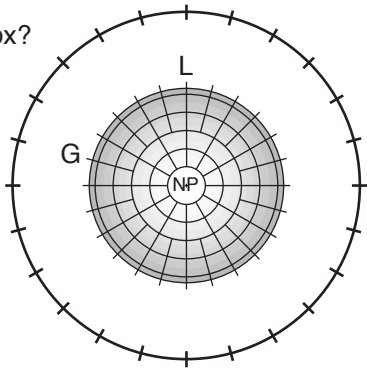


AST101: Longitude Worksheet #2 (Sidereal)

L = local position, G = Greenwich, ☉ = Sun, VE = Vernal Equinox = 0hr RA

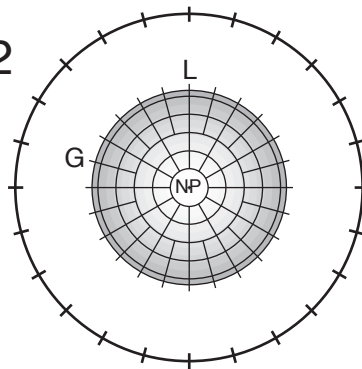
Where's Vernal Equinox?

1) LST = 20h



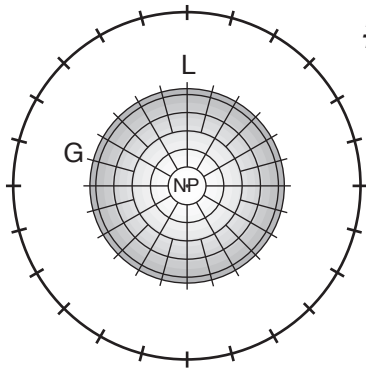
#1

#2



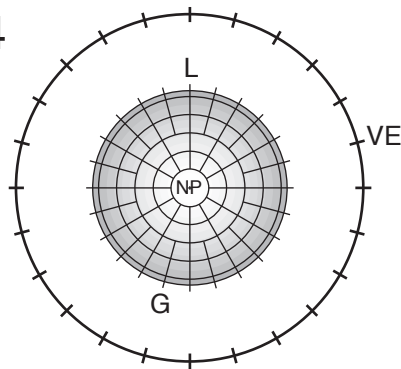
1) Sirius in local transit (RA=7h)

3) GST = 13h



#3

#4



1) LST =

2) GST =

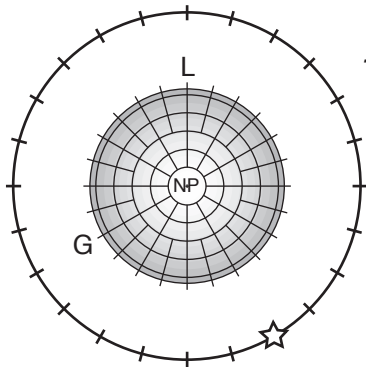
3) Long. =

RA of Altair = 20h

1) LST =

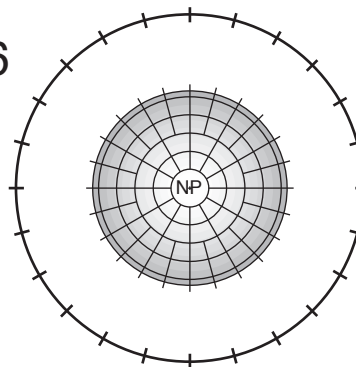
2) GST =

3) Long. =



#5

#6



LST = 4h,
GST = 17h
1) Long. =

Tips for doing longitude problems:

- 1) Longitude East increases CCW; longitude West increases CW (from Greenwich).
- 2) Local Solar Time increases CW from the local meridian (due south).
- 3) Time increases CCW through time zones. (Greenwich time is later than Eastern time, for example.)
- 4) Sidereal Time equals the RA on the local meridian (transiting).
- 5) RA increases CCW from the VE (=0h RA).