

Review of Coordinate and Alignment Lectures  
Astronomy 25

1) Which of these are constant and which vary with time/location?

Constant                      Vary

Celestial sphere -

Celestial horizon -

Celestial equator -

Zenith -

N & S Celestial Poles -

Meridian -

2) It's best to view an object near the horizon or meridian? \_\_\_\_\_

3) Will the numbers obtained using the alt/az coordinate system be useful to someone at another place or time? \_\_\_\_\_

4) Declination is measured pretty much like latitude. (T/F)

5) Right Ascension is measured pretty much like longitude. (T/F)

6) Declination is measured in what units? \_\_\_\_\_

7) Right ascension is measured in what units? \_\_\_\_\_

8) The "zero-point" for right ascension is the \_\_\_\_\_ .

9) Right ascension increases to the East/West? \_\_\_\_\_

10) The declination of our zenith is the same as our \_\_\_\_\_ .

11) The ecliptic is the path of the \_\_\_\_\_ against the stars.

12) The zodiacal constellations lie along the \_\_\_\_\_ .

13) How many of them are there? \_\_\_\_\_

- 14) The earth's polar axis traces a circle in the sky every 20,000 years or so because of the earth's \_\_\_\_\_.
- 15) The earth is tilted \_\_\_\_\_° to its orbit around the Sun.
- 16) Why is it hotter in summer than in winter? (Small diagram sufficient.)

17) Fill in the data or check the correct answer, as applicable:

	<u>R.A</u>	<u>Dec.</u>	<u>Longest Day?</u>	<u>Shortest Day?</u>	<u>Date of Event</u>
Vernal Equinox					
Summer Solstice					
Autumnal Equinox					
Winter Solstice					

- 18) Between \_\_\_\_\_° and \_\_\_\_\_° latitude, the Sun may appear directly overhead.
- 19) If the earth had no tilt, what would be the result? \_\_\_\_\_
- 20) The most important star in telescope alignment for us is \_\_\_\_\_.
- 21) The \_\_\_\_\_ mount compensates for earth's movement most easily.
- 22) What setting circle will always need adjustment during calibration? \_\_\_\_\_
- 23) Polaris is exactly at the North Celestial Pole. (T/F)
- 24) If you don't find a desired star in your FOV after moving the telescope to its setting circle coordinates it means your alignment is bad. (T/F)
- 25) The electric clock drive on our telescope adjusts the (Dec. or R/A) for earth's movement? \_\_\_\_\_