

## AST101 Quiz #4

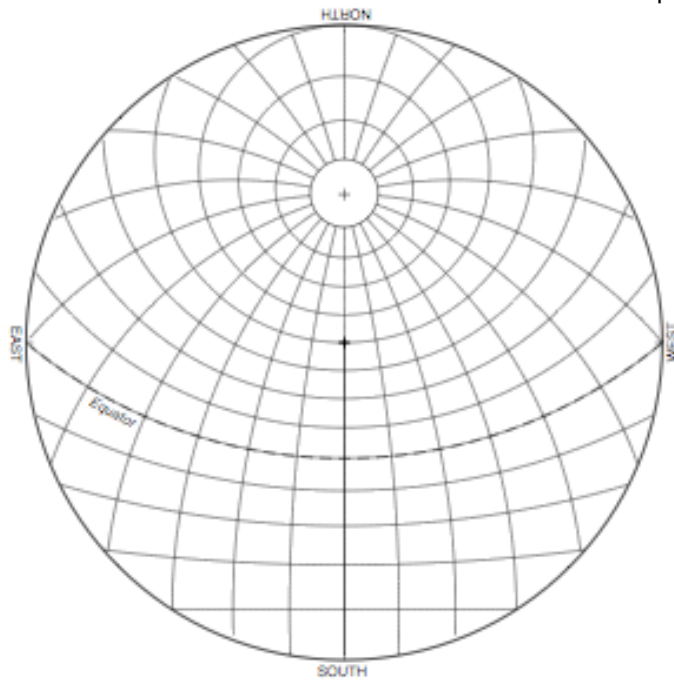
Take-home, due October 13.

Name: \_\_\_\_\_

For questions 1 through 5, the local apparent solar time for the diagram below is 8 am. The sidereal time is 14h.

1. What is the sun's RA?
2. What is the approximate date?
3. What is the sun's Declination?
4. Plot an "X" on the diagram to mark the sun's location.
5. The sun is rising in the east-southeast. Where will it set?

The RA lines on the diagram are 1 hour apart; the declination lines are  $10^\circ$  apart.



6. If the sidereal time is 5h and the sun's RA is 2h, what is the local apparent solar time (remember am or pm)?
7. In the situation for question #6, what is the approximate date?
8. In the situation for question #6, what is the approximate sun's Declination?