

# AST101 Quiz #2 — The Planisphere

Take-Home, due September 27 at beginning of class.

**In answering the following questions, be sure to use the **transparent grid** with your planisphere, when appropriate.**  
**All times refer to **local time (non-daylight)**.**

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

1. What bright star is about to set near the west-southwest on August 15 around 9 p.m.?
2. The bright star Arcturus in Bootes sets about what time on September 15? (remember to include a.m. or p.m.)
3. In what direction does the star Arcturus set? (To the nearest 16<sup>th</sup> of a circle: N, NNE, NE, ENE, E, and so on.)
4. What time on July 15 is the bright star Antares due south (closest to the south horizon)? (remember a.m. or p.m.)
5. What is the altitude (in degrees) of the bright star Rigel in the constellation Orion at 5 a.m. on October 5?

6. What is the azimuth (in degrees) of Rigel at 9 pm. on February 10?
7. The stars on December 20 at 8 p.m. are in the same position as they are at what time on September 20? (remember a.m. or p.m.)
8. How many hours does the bright star Altair spend above the horizon?
9. What is the approximate altitude (in degrees) of the North Star above the northern point of the horizon? (Use grid.)
10. What time does the sun set on March 21? (Pisces equator/ecliptic crossing)