- Q1: According to the heliocentric model, the reason planets always appear to be near the ecliptic is that
- a) the ecliptic is only 23.5 deg from the Celestial Equator
- b) the planets revolve around the Sun in nearly the same plane
- c) compared to the stars, the planets are near the Sun
- d) the plaets come much nearer to us than does the Sun

Q2: In the northern hemisphere, the stars rise in the East, set in the West, and revolve CCW around the NCP. In the southern hemisphere, what happens?

- Q3: To see the greatest # of stars possible throughout one year, a person should be at a latitude of
- a) 90 deg
- b) 45 deg
- c) 0 deg

Q4: If Aldebaran rises tonight at 2:00 am, next month it will rise

- a) at 11:00 pm
- b) at midnight
- c) at 1:00 am
- d) at 2:00 am
- e) at 3:00 am

Q5: You're on the equator on September 21. At noon, how many degrees above the horizon is the Sun?

- a) 0
- b) 30
- c) 45
- d) 60
- e) 90

- **Q6:** The zenith distance of Polaris
- a) is 90 deg
- b) is 23.5 deg
- c) is 0 deg
- d) varies with your latitude

Q7: A hypothetical planet has a semi-major axis twice that of Earth's. It's sidereal period will be ...?

Q8: Imagine a planet whose rotation axis is perpendicular to its orbital planet. How would you describe its seasons?

- **Q9:** The phase of the Moon at a lunar eclipse
- a) is always full
- b) is always new
- c) is always waxing crescent
- d) is always waning gibbous

Q10: When it is noon local Solar time in New York City, what time is it in the Mountain Time Zone?