# ASTRONOMY UNIT 1

Name : _____

Period: _____ Date: _____

# HOMEWORK

- **This homework is due at the end of the unit.**
- **Write the letter of the correct answer in the blank to the left of the question.**

**_____ 1. Earth rotates 360˚_____ when viewed looking down at the North Pole.**

**A. clockwise (east-to-west)**

**B. counterclockwise (west-to-east)**

**_____ 2. To an observer on Earth, the celestial sphere appears to rotate _____ around Polaris…..**

**A. clockwise**

**B. counterclockwise**

**_____ 3. …making the seasonal stars rise in the _____ and set in the _____.**

**A. east/west**

**B. west/east**

**_____ 4. The stars appear to move 1˚ ____ than 360˚ in one 24-hour solar day.**

**A. more**

**B. less**

**_____ 5. Which of the following stars will be circumpolar for an observer at latitude 40˚ North? In the blank to the right, list all letters that apply.**

**A. α Ursae Majoris**

**B. β Cassiopeiae**

**C. η Ursae Majoris**

**D. β Persei**

**E. α Draconis**

**_____ 6. Using the star list from question five, which of the stars will be circumpolar for an observer at latitude 30˚ North?**

**_____ 7. A star of magnitude equal to +2.0 will be brighter than a star of magnitude…**

**A. +3.0 but not magnitude +1.0.**

**B. +1.0 but not magnitude +3.0.**

**C. -1.0 and magnitude -3.0**

**D. +1.0 but not magnitude -1.0.**

***Questions 8 - 13 refer to a location where $P_N$ is 60˚ above the northern horizon.***

**_____ 8. What is the observer's latitude?**

**A. 60˚**
**B. 45˚**
**C. 30˚**

**_____ 9. How high above the southern horizon is the celestial equator?**

**A. 60˚**
**B. 45˚**
**C. 30˚**

**_____ 10. The stars will rise in the east and set in the west at an angle of _____ to the southern horizon.**

**A. 60˚**
**B. 45˚**
**C. 30˚**

**_____ 11. Circumpolar stars will lie within a circle of radius _____ to $P_N$.**

**A. 60˚**
**B. 45˚**
**C. 30˚**

**_____ 12. At this latitude there will be _____ circumpolar stars than at latitude 20˚ North.**

**A. more**
**B. less**

**_____ 13. At this latitude, there will be _____ *different* stars visible in the year than at latitude 20˚ North.**

**A. more**
**B. less**