

Name: _____

Basic Coordinates & Seasons – Pretest

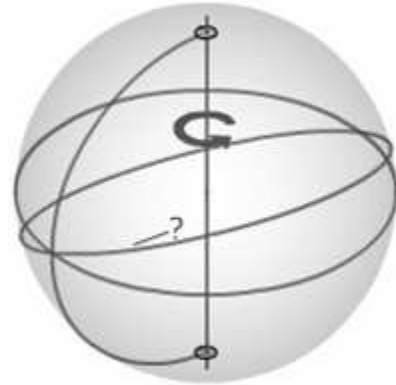
Answer the following questions.

Question 1: Which of the following coordinates or coordinate feature does *NOT* belong to the Celestial Equatorial Coordinate System?

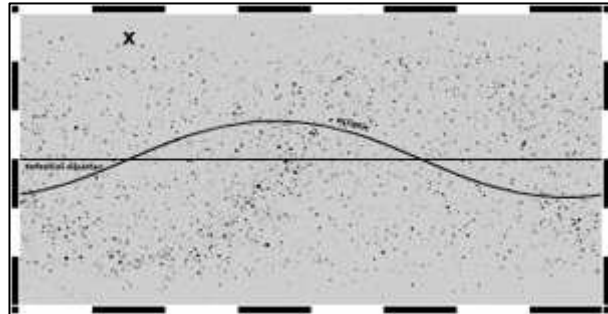
- a) North Celestial Pole
- b) 0 Hour Circle
- c) Celestial Equator
- d) Latitude
- e) Right Ascension

Question 2: What is the name of the coordinate feature indicated in the figure to the right?

- a) North Celestial Pole
- b) 0 Hour Circle
- c) Celestial Equator
- d) South Celestial Pole
- e) Ecliptic



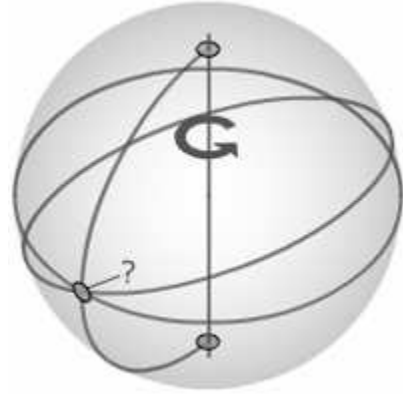
Question 3: To the nearest 15° , what is the **declination** of the coordinate shown? _____



Question 4: A star is at 9 h, 45° . What will the coordinate of the star be 12 hours from now? _____

Question 5: What is the Seasonal Point shown to the right?

- a) Vernal Equinox
- b) Summer Solstice
- c) Autumnal Equinox
- d) Winter Solstice
- e) None of the Above



Question 6: Circle all of the following to which the number 23.5 has relevance.

- a) The angle between the north celestial pole and the earth's north pole
- b) The angle between the north celestial pole and the axis of the earth's rotation about the sun
- c) The maximum declination of the sun
- d) The declination of the north celestial pole
- e) The angle between the celestial equator and the ecliptic

Question 7: A particular observer sees almost no shadow from a stick in the ground at noon on June 21. Where is the observer?

- a) Very near the Tropic of Cancer
- b) Somewhere between the Tropic of Cancer and the Equator
- c) Very near the equator
- d) Somewhere between the Equator and the Tropic of Capricorn
- e) Very near the Tropic of Capricorn

Question 8: Circle all of the following which are a significant factor in the summer months being hotter (for the northern hemisphere).

- a) The sun rays are more direct and thus felt more intensely
- b) The length of time the sun in the sky is longer than average
- c) The sun is more actively magnetically during the summer
- d) The northern hemisphere of the earth is tilted towards the sun
- e) The earth is closer to the sun during the summer
- f) The earth slows down in its orbit during the summer

Question 9: The image below shows lines that all have the same value of what coordinate?

- a) longitude
- b) latitude

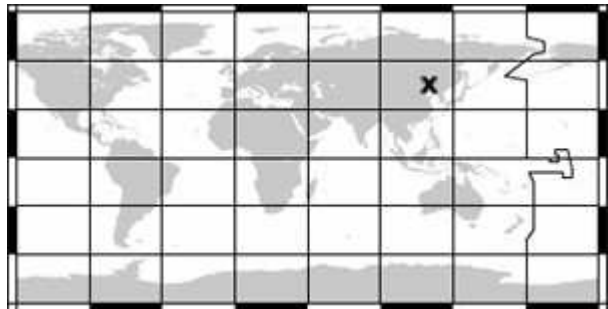


Question 10: What is the name of the line shown below?

- a) Prime Meridian
- b) Not a named line
- c) International Date Line



Question 11: To the nearest 15°, the **x** is at approximately what latitude coordinate? _____



Question 12: What is the value of 43.75° in degrees and minutes? _____