
Exercise A13: Precession and Nutation

Student name: _____ Class: _____ Date: _____

Check the box with the correct answer.

Question 1: What is the precession period of the Earth's spin axis?

- a. 6,000 years
- b. 11,600 years
- c. 25,600 years
- d. 22,000 years

Question 2: What is significant about the diameter of the precession circle?

- a. It is equal to twice the angular tilt of the Earth's spin axis.
- b. It is equal to the angular tilt of the Earth's spin axis.
- c. It is equal to one-half the angular tilt of the Earth's spin axis.
- d. It is equal to the separation between Polaris and the North Ecliptic Pole.

Question 3: At what time in the past could Vega have been considered as the North Star? (Hint:

Run time backwards to determine this date.)

- a. 1,000 BC
- b. 5,000 BC
- c. 12,000 BC
- d. 15,000 BC

Question 4: In which constellation was the Vernal equinox when Hipparchus made his observations in the second century BC? (Hint: Press the **Run Time Backward** button).

- a. Capricornus
- b. Aquarius
- c. Aries
- d. Pisces

Question 5: What is the period of nutation?

- a. 5 years
- b. 10 years
- c. 19 years
- d. 40 years