

Which of the following statements about the ecliptic plane is not true?

- It is the plane of the moon's orbit around the earth

Which of the following statements about lunar phases is true

- It is possible to have 2 full moons during January but not during February

Which of the following celestial phenomena is the smallest

- The orbit of the moon

Suppose you lived at the Earth's equator. Which of the following statements would not be true

- the celestial equator goes through your sky from due east on your horizon, through 50 degrees altitude in the south, to due west on the horizon

When you observe a star for a period of a few hours, you notice that it moves across the sky. What is responsible for this motion

- Earth's rotation on its axis

On the cosmic calendar (where the age of the universe is condensed into the equivalent to one calendar year) most of recorded history takes up what portion of the "year"?

- the last few seconds of the year

The order of the planets, from the sun outward is

- mercury, venus, earth, mars, jupiter, saturn

Which of the following is the reason for the solar day being longer than a sidereal day?

- the combined effect of the rotation of the Earth and its orbit around the sun

Which of the following statements about the moon is true

- the moon's distance from the earth varies during its orbit

One light year is closest to what distance

- ten million million kilometres

Which of the following is the best reason for the leap years

- the combined effect of the rotation of the earth and the precession of the earth's axis

The apparent visual magnitude of star A is +2 and the apparent visual magnitude of star B is +1. Based on this information which statement below must be true

- light output can distance cannot be determined from a star's apparent visual magnitude alone

Which of the following would appear brightest in the night sky

- the full moon

Which of the following best describes the Milky Way Galaxy

- a spiral galaxy with a disk about 100,000 light years in diameter and containing between 100 billion and 1 trillion stars

What conditions are required for a lunar eclipse

- the phase of the moon must be full, and the nodes of the moon's orbit must be nearly aligned with the earth and the sun

We can't detect stellar parallax with naked-eye observations. Which of the following would make parallax easier to observe?

- increasing the size of the earth's orbit

Which statement below most accurately describes modern constellations

- there are 88 well defined regions on the celestial sphere

You are standing on the earth's equator at midnight which way is polaris, the north star?

- on the northern horizon

Suppose the date is June 21st and the sun never sets, just touching your Northern horizon at midnight. Where are you?

- the arctic circle

The size of a hockey rink is best measured in what units

- metres

If the moon is setting at midnight, the phase of the moon must be

- first quarter

Which of the following correctly describes the meridian in your sky

- a half circle extending from your horizon due north through your zenith, to your horizon due south

Which of the following statements is true?

Answer is both B and C

Statements were

- both the northern and southern hemispheres receive the same amount of sunlight on the equinoxes
- The northern hemisphere receives the most direct sunlight on the summer solstice

Which of the following best describes the tropic of Cancer

- it is a place where the sun is directly overhead at noon on the summer solstice

The sun is rising in the east and will be on your meridian in 2 hours. What time is it currently?

-10 am

While in Bracebridge, ON where the latitude is 45 degrees, at the spring equinox (about March 21st) the sun follows the path where it

- rises due east, crosses the meridian at an altitude of 45 degrees in the south, and sets due west

What is an astronomical Unit

- the average distance from the earth to the sun

What conditions are required for a solar eclipse

- the phase of the moon must be new, and the nodes of the moon's orbit must be nearly aligned with the earth and the sun

Which of the following is the furthest from the sun?

-Proxima Centauri

If it is midnight in Waterloo it is

- daytime in Sydney Australia

The lunar month is longer than the sidereal month because

- the moon has to complete more than one full orbit around the earth to complete the cycle of lunar phases

What is the ecliptic

- the sun's apparent path along the celestial sphere

Which of the following celestial phenomena is the largest

- the Milky Way galaxy

How long does it take light from the surface of the sun to get to earth?

- a few minutes

Which of the following has your address in the correct order? In this question the local group also means the local Clusters

- you, Earth, Solar system, Milky Way, Local Group, Local supercluster

The size of our galaxy in light years is closest to which of the following numbers

-100,000

Which of the following statements about the celestial sphere is not true

- the celestial equator lies in the ecliptic plane

Which of the following is the largest?

- size of a typical galaxy

If you lived at the north pole at night the stars would

- never rise or set, but move in circles around polaris, the north star