

A – it is at perihelion.
B – it going the fastest.
C – when it is winter in the Northern Hemisphere.
D – All of the above.
 E – None of the above

12.) The Hubble Space Telescope is in orbit so...

A – it can be in zero-gee.
B – it can be above any atmospheric distortions.
C – it can point away from the Sun all the time.
D – All of the above.
 E – None of the above

13.) Most people spend little time looking at the stars because...

A – air and light pollution in urban areas make it harder to see the faintest stars.
B – electric lights and television allow us to work and play indoors at night.
C – you can't easily see the stars driving around at night in your car.
D – All of the above.
 E – None of the above

14.) Kepler's Second Law includes...

A – sweeping an equal area in equal time.
 B – planets orbit in elliptical orbits with the Sun at one focus.
 C – an object in motion tends to stay in motion unless acted upon by a net external force.
 D – for every action there is an equal and opposite reaction.
 E – None of the above

15.) Newton's Third Law includes...

A – sweeping an equal area in equal time.
 B – planets orbit in elliptical orbits with the Sun at one focus.
 C – an object in motion tends to stay in motion unless acted upon by a net external force.
D – for every action there is an equal and opposite reaction.
 E – None of the above

16.) With an apparent magnitude of -1.47, Sirius _____ than Vega, which has an apparent magnitude of 0.03 .

A – is brighter
 B – is dimmer
 C – appears brighter
 D – appears dimmer
 E – None of the above

17.) Sirius is 8.60 LY away, so the light we see left Sirius...

A – 8.60 years ago.
 B – twice 8.60 years or 17.20 years ago.
 C – moments ago.
 D – too long ago to measure.
 E – None of the above

18.) The Milky Way contains 100 _____ stars.

A – hundred
 B – thousand
 C – million
D – billion
 E – None of the above

19.) Star HR 7162-A is similar to our own Sun. It is 48.9 LY away. It is barely visible from Earth with an apparent magnitude of 6.22 and an absolute magnitude of 5.34. The Sun has an absolute magnitude of 4.8. If you were 48.9 LY away at HR 7162-A, you...

A – could not see our Sun.
 B – would see our Sun as a bright star.
C – would just be able to see our Sun.
 D – would require the Hubble Space Telescope to see the Sun.
 E – None of the above

20.) The Solar System is several _____ miles wide.

A – hundred
 B – thousand
 C – million
D – billion
 E – None of the above

21.) An AU is the ...

A – distance from the Earth to the Sun.
 B – distance from the Earth to the Moon.
 C – distance to the nearest star.

D – the standard distance for determining absolute magnitude.

E – None of the above

22.) When we say light from a star is red-shifted, it is similar to the Doppler Effect with sound from a moving train's horn where...

A – the star is heading towards us and the horn is higher in pitch.
 B – the star is heading towards us and the horn is lower in pitch.
 C – the star is heading away from us and the horn is higher in pitch.
D – the star is heading away from us and the horn is lower in pitch.
 E – None of the above

23.) If something is called a scientific theory...

A – then it must be right.
 B – if the least little flaw is exposed, then the theory is abandoned and never spoken of again.
C – it is tested and refined in light of new experiments and observations.
 D – it was developed by the finest minds and the most expensive equipment.
 E – None of the above

24.) Astronomers can use *Parallax* to find the distance to objects which are...

A – very bright in the sky.
 B – located on the ecliptic.
C – relatively close to the Earth.
 D – have strong colors.
 E – None of the above

25.) Any grouping of stars can be described as...

A – a constellation.
 B – the zenith.
 C – an ecliptic.
D – an asterism.
 E – None of the above

26.) The observable universe appears to contain 100 billion galaxies, each with perhaps an

average 100 billion stars. So the total number of stars in the universe would be ...

A – 100,000,000,000.
 B – 200,000,000,000.
 C – 10,000 billion.
D – 10,000,000,000,000,000,000,000,000.
 E – None of the above

27.) Star X is the same as Star Y. Star X is 5 LY away and Star Y is 50 LY away. Star Y appears to be _____ than Star X.

A – 5 times brighter
 B – 10 times brighter
 C – 50 times brighter
 D – 100 times brighter
E – None of the above (it would be 100× fainter)

28.) Outside our Solar System, we can only observe things which...

A – emit light (glow).
 B – reflect light.
 C – influence the motion of other objects by their mass and gravity.
D – All of the above.
 E – None of the above

29.) The Moon is closest to the Earth at...

A – apogee.
 B – aphelion.
C – perigee.
 D – perihelion.
 E – None of the above

30.) The Greeks assumed that the planets must orbit in circular orbits because...

A – they considered circles to be perfect as were the Heavens.
 B – they thought epicycles were special.
 C – they were sure that everything revolved around the Earth.
 D – All of the above.
 E – None of the above