

SCORE  
(5 pts max)

**ASTRONOMY 2  
THIRD HOUR SESSION "C"**

**ACTIVITY: Constellation Charts: Part II –  
Ecliptic, Seasons, Precession**

NAME KEY-C

DATE

ID#

1. Other than stars, name three other types of celestial objects plotted on the charts.

Galaxies

Clusters

Nebulae

2. Name three constellations found on the ecliptic.

Capricornus, Aquarius, Pisces, Aries, Taurus, Gemini, Cancer, Leo, Virgo, Libra, Scorpius, Sagittarius, and Ophiuchus since it also lies on the ecliptic

3. Which constellation does the Sun occupy on the date of August 25 ?

Leo

4. Which constellation will the Sun occupy during the next Equinox ? And for the Solstice that follows this Equinox , which constellation will the Sun occupy?

Pisces

Taurus or Gemini

5. Near what line should you find the Moon or the planets?

Ecliptic

6. Other than the Sun, which very bright stars are near the meridian at noon on June 10 ?

Capella

Rigel

7. What are the Right Ascension and Declination coordinates for the star Algol in the constellation of PERSEUS ?

3h 05m ( $\pm 5m$ )

$+41^\circ$  ( $\pm 1^\circ$ )

8. What is the name of the star at RA = 2h 20m and Dec =  $-3^\circ$  ? From the chart legends, what type of star is it and what is its magnitude?

Mira

Variable

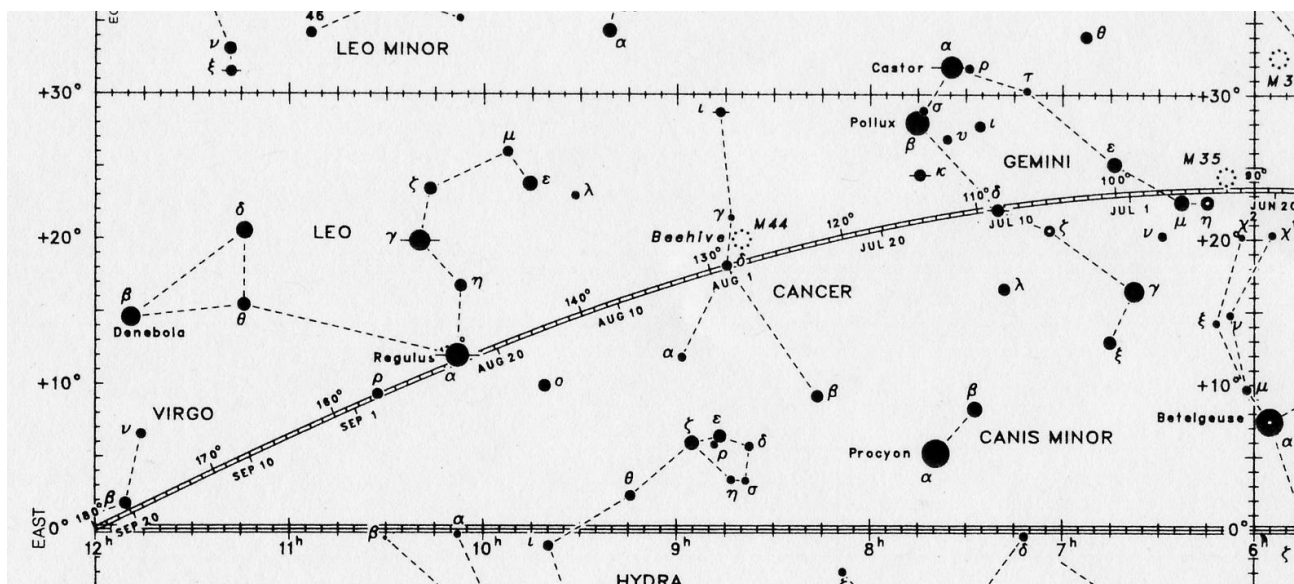
3

9. If Mars is in opposition on February 1 , what constellation does it occupy?

Cancer

(Questions continue on back)

Date	RA	Dec	Date	RA	Dec
			March 1	11h 09m	+09° 59'
December 16	11h 10m	+08° 02'	March 16	10h 48m	+11° 47'
January 1	11h 29m	+06° 34'	April 1	10h 30m	+12° 51'
January 16	11h 39m	+05° 59'	April 15	10h 26m	+12° 38'
February 1	11h 38m	+06° 28'	May 1	10h 32m	+11° 25'
February 15	11h 28m	+07° 52'	May 16	10h 45m	+09° 31'



10. The table above list the coordinates of Mars for several months. Plot Mars on the chart above. What type of motion is being exhibited by Mars?

Retrograde

11. Estimate the date of Mars's opposition from the plot you made in the previous problem.

March 1 to March 16