

SCORE
(5 pts max)

ASTRONOMY 2
THIRD HOUR SESSION "D"
ACTIVITY: Introduction to *Starry Night*
Software

NAME KEY-D

DATE

ID#

For all questions below, unless stated otherwise, the year is assumed to be the current year.

1. According to *Starry Night*, what's the latitude of Sacramento?

38° 39.6' N

2. Find (using Ctrl-F) the Sun on February 23 at noon PST. What time will it rise and set?

6:47 am (±1 min)

5:50 pm (±1 min)

3. For the date in #2, set the time to 7:30 pm (and press the stop [■]). What are the right ascension and declination of Mars ?

2^h 16.040^m
(± .010^m)

+14° 15.905'
(± .050')

4. For the same date and time, what are the altitude and azimuth of the object in question #3? Round both your answers to the nearest degree.

39°(±1°)

256°(±1°)

5. Use the find feature (Ctrl-F) and find Jupiter on the same date and time. This may require you to "Hide" the horizon in order to see it. When you do this, *Starry Night* will zoom in show a nice disk of Jupiter. Place the cursor over the planet. What constellation is it in?

Ophiuchus

6. Now zoom out on Jupiter by selecting the – magnification icon () from the side panel. When you zoom out far enough, you should see dots around the planet. These are the major moons of Jupiter. Select the one that appears closest to Jupiter and identify it.

Io

7. For the moon of Jupiter selected in #6, find the angular separation between this moon and the center of Jupiter

0' 35" (±10")

(Questions continue on back)

8. For the same date and time, find our Moon and look at its shape. What is its phase?

Waning Gibbous

9. Find Venus. According to the Information Box, how much of the illuminated side do we see?

70.61% (or 71%)

10. For the same date and time are the same as in #3, find the object named Alhena. What constellation is it in? (Put in Full Name as is)

Gemini

11. Making sure the date and time are the same as in #3, view the eastern horizon by selecting the Look East (E) icon. Make sure the horizon is displayed by pushing the Horizon icon (the button which has a tree on it). Make sure the constellation borders and names have been turned on. Name a constellation whose borders are completely above the horizon and within the view of the window (The field of view should be set at 100°).

Sextens or Leo Minor

12. Now Look South (S). Name any portion of a constellation (if any) that can be seen in both the East (as in #11) and South view.

Pyxis (or Puppis or Hydra or Monoceros or Canis Minor)

13. For the same date and time as in #3, look for the “Interesting Events” under the Sky menu item. What is the date of the next eclipse and what type of eclipse is it?

07/02/19	Solar eclipse (total)
----------	-----------------------

14. Find M31. What is the common name of the object?

Andromeda Galaxy