

Name _____

Date _____

Lab Report – Milky Way

3.1 Galaxies and Galaxy Classification

A. What is a **galaxy**?

B. What is meant by “**Local Group**”?

C. Identify the following **galaxies** as **elliptical**, **spiral**, **barred spiral**, or **irregular**.



a) _____



b) _____



c) _____



d) _____

3.2 Galactic Coordinates

B. “O” stars in the Milky Way (see section 2.2B)

(3)

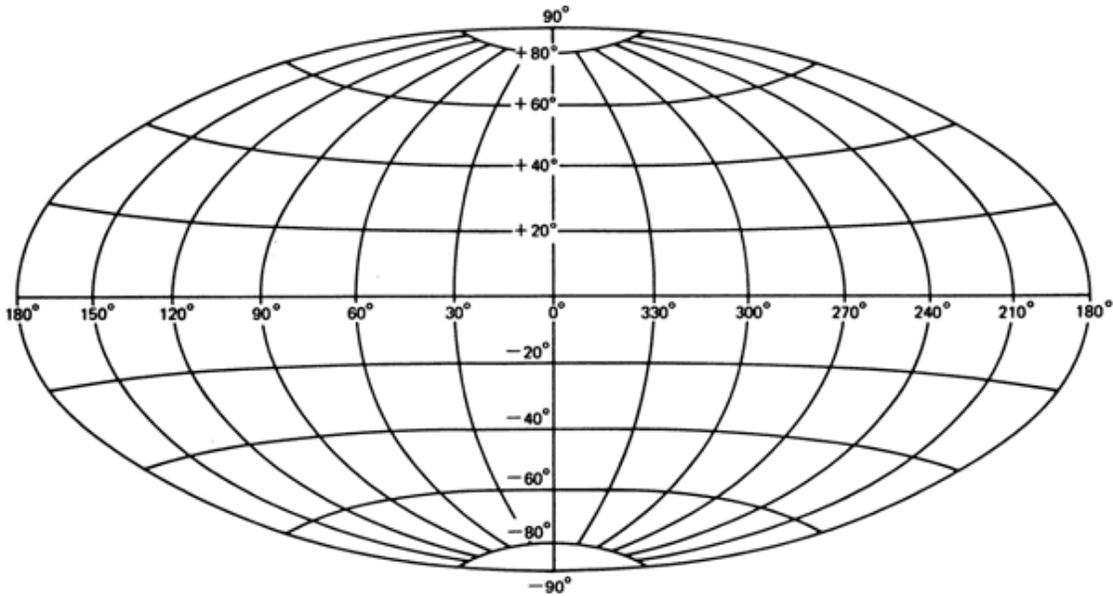


Figure 3.1 Horizontal scale is galactic longitude. Vertical scale is galactic latitude.

C. Long-period variable stars (mostly cool giant stars) in the Milky Way (see section 2.2C)

(3)

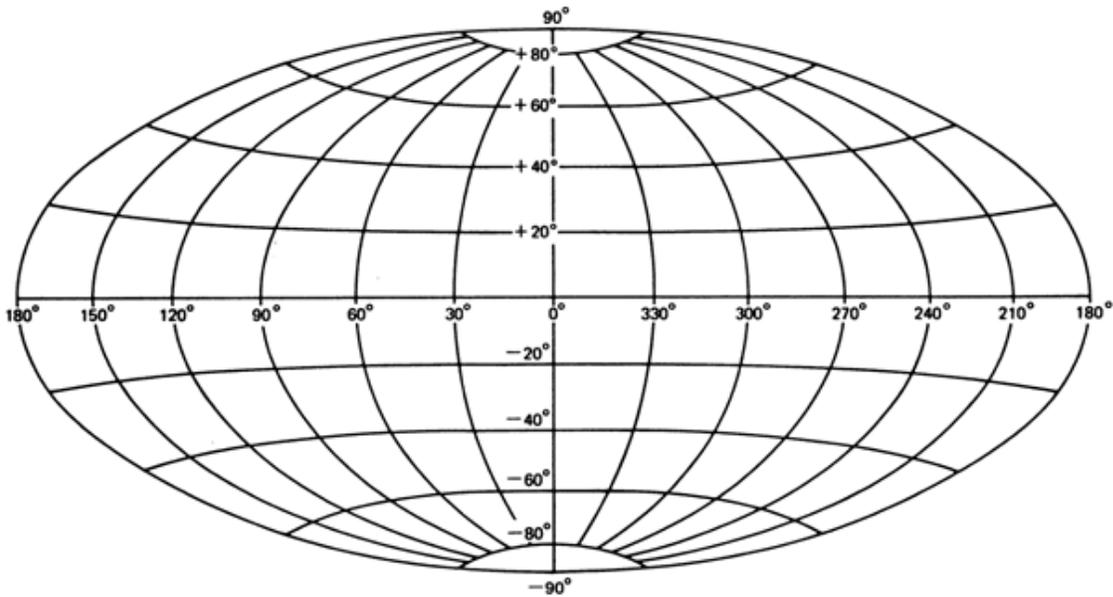


Figure 3.2 Horizontal scale is galactic longitude. Vertical scale is galactic latitude.

(3)

3.3 General Questions on the Milky Way

B. What are spiral tracers?

D. What difference is there between a lenticular galaxy and a spiral galaxy?

E. Which elliptical galaxy would have the most elongated shape, an “E2” galaxy or an “E6” galaxy?

C. Find the luminosity of a star whose apparent brightness is 1.03×10^{-8} watt/m², and whose distance is about 3×10^{18} meters.