

## Lab 9

### Mapping the Galaxy

Names: \_\_\_\_\_

**13.4 Exercises** Describe distribution of each type of object. Be as detailed as possible and make references to the plane of the Milky Way which has already been marked on each map and also the center of the Milky Way Galaxy which is toward the constellation Sagittarius. **(20 points)**

Milky Way:

Open Clusters:

Gaseous Nebulae:

Globular Clusters:

Galaxies:

## 13.5 Questions

1. Do any of the descriptions of the idealized distributions of objects discussed in section 13.2 (i.e. center of flattened distribution, edge of flattened distribution, center of uniform distribution, edge of uniform distribution) match the descriptions of the distributions of the celestial objects? If so, which ones? Explain your reasoning. **(10 points)**
2. Considering the answer to the previous question, where do you think we are located with respect to the system of globular clusters? open clusters? gaseous nebulae? Explain your reasoning. **(10 points)**

3. Draw a sketch of the Galaxy based on your answers to Questions 1 and 2. Draw your picture showing our location relative to the distributions of the four types of objects. Be sure to include all four types of objects and label them. **(15 points)**

4. What do you think the distribution of galaxies, as compared with the distributions of the other objects, tells you about where galaxies are located? **(10 points)**



