

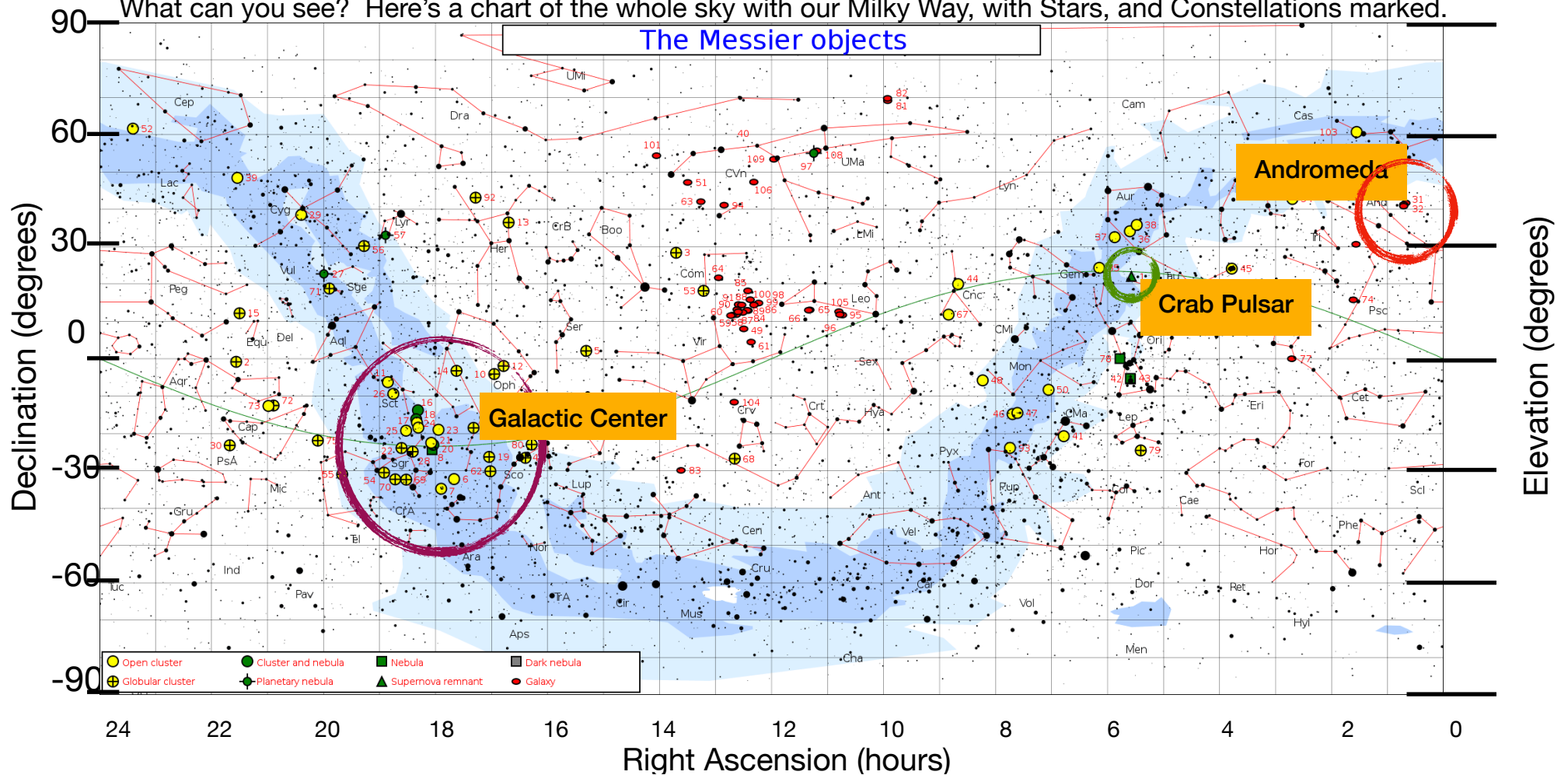
Who Am I?: _____ (name)

Where Am I? Location _____ Longitude: _____ Latitude _____ (degrees)

When Am I?: Date: _____ Time Zone _____ Offset time from UTC/GMT: _____ (hours)

Can you see the whole sky? **NO!**

What can you see? Here's a chart of the whole sky with our Milky Way, with Stars, and Constellations marked.



The X axis is Right Ascension (RA hours), because the sky rotates overhead in 24 hours.

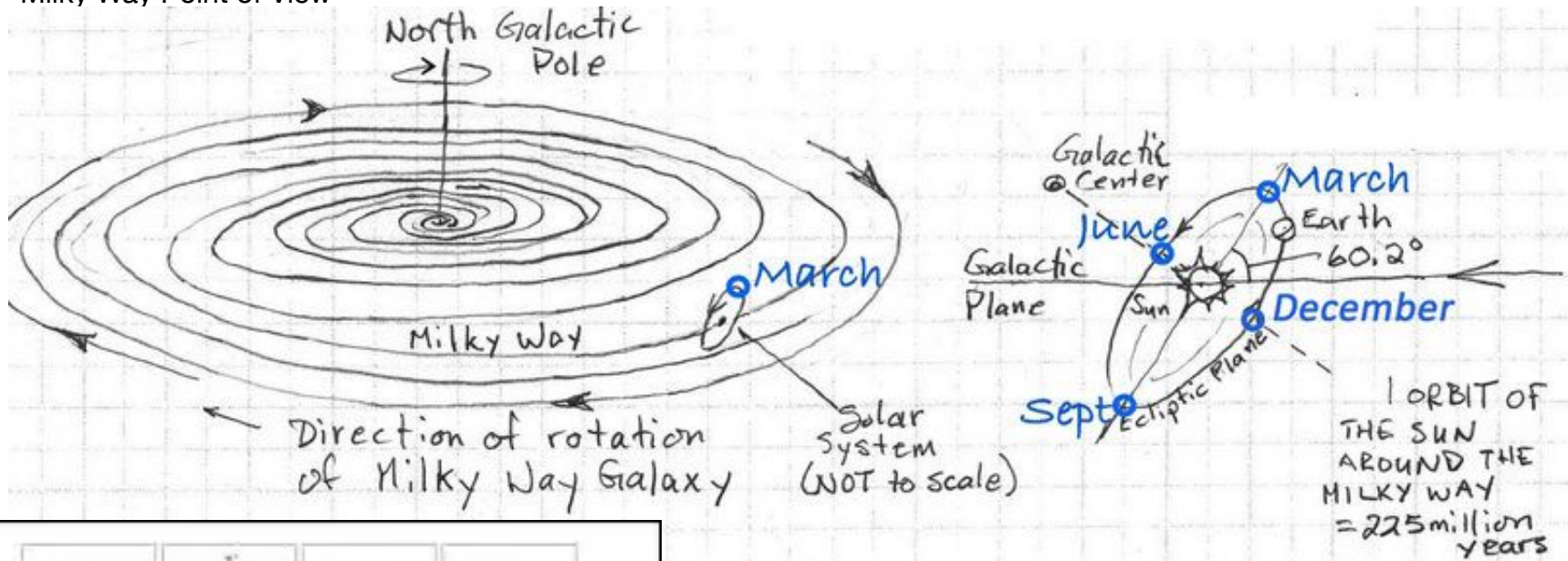
The Y-axis is Declination (degrees) direction, North and South, the second part of the coordinates of all objects in the sky.

First question: What Declination (degrees) is Straight Up at your location?

Answer: Your Geographic Latitude.

1. Draw a line across the top of the plot showing the part of the sky you can see when looking straight up.

2. Draw a line across the bottom of the plot showing as low a Declination as you can see: **Answer: Your Geographic Latitude - 90**



$$\alpha_{\min} = 1.22 (\lambda/D)$$

$$1.22 * 21 \text{ cm} / (10 \text{ inches} * 2.54 \text{ cm/inch}) = 1 \text{ radian}$$

1 radian = $180/\pi = 57.3$ degrees

