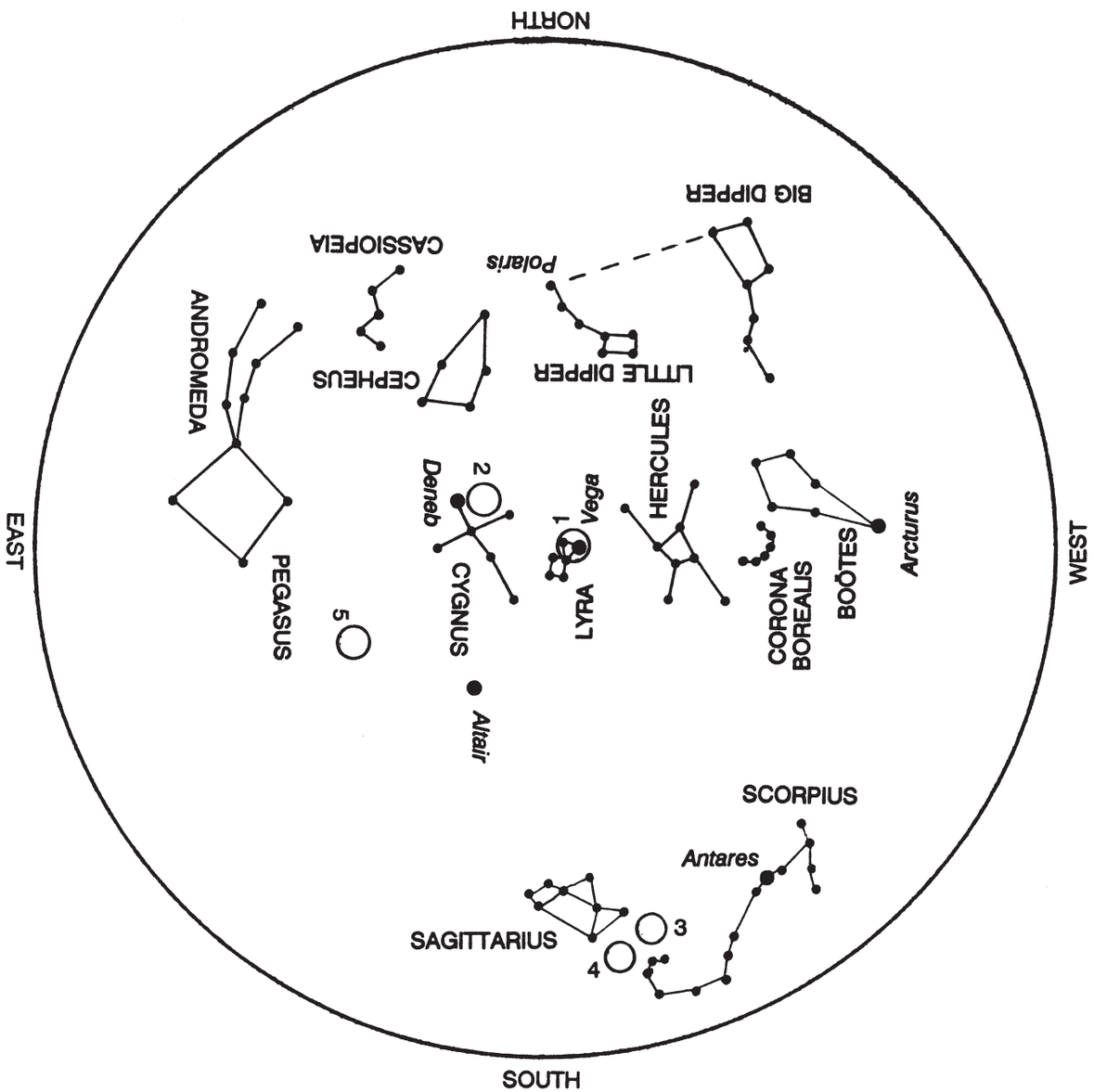
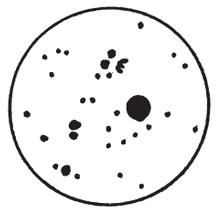
September (Approximately 8:30 p.m.)

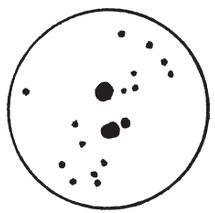


1. ϵ Lyra



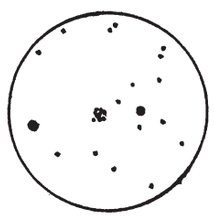
Double Double Star in Lyra R.A. $18^h42.7^m$ Dec. 39°37'
With binoculars, a pair of stars can be seen. With a small telescope, each star in this pair becomes a double star, for a total of four stars. The two visible through binoculars are separated by 1.2 trillion miles, or three hundred times the distance between the Sun and Pluto. The pair lies approximately 180 ly from us.

2. Omicron Cygnus



Double Double Star in Cygnus R.A. $20^h13.0^m$ Dec. 47°05'
Other names: Omicron-1 & Omicron-2 Cygni, 31 & 32
The two stars that form this double star system are each a double star but their companion stars are too faint to be seen with binoculars. The stars visible through the binoculars form an optical double. They look close together in the sky, but they are not bound together by gravity. Both stars in this system have a yellow-orange tint to them.

3. M6

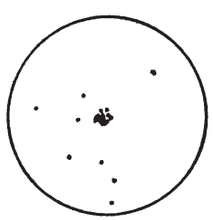


Open Cluster in Scorpius R.A. $17^h36.8^m$ Dec. -32°11'
Other name: NGC 6405
Near the tail of the Scorpion, M6 and its close companion M7 can be see with the naked eye on dark clear nights. Through binoculars or a telescope some people can see a butterfly shape among the 80 stars in the cluster. This cluster lies between 1400 and 1600 ly from us and is 20 ly in diameter. The central region is about 9 ly across.

4. M7

Open Cluster in Scorpius R.A. $17^h50.7^m$ Dec. -34°48'
Other name: NGC 6475
Just south of M6 in the scorpion's tail, this cluster is visible to the naked eye on dark, clear nights. M7 contains approximately 80 stars and at 818 ly distant, is almost twice as close to us as M6.

5. M15



Globular Cluster in Pegasus R.A. $21^h27.6^m$ Dec. 11°57'
Other name: NGC 7078
Although no individual stars can be seen through binoculars, you can observe a fuzzy, circular, cloud-like object. This cluster is approximately 39,000 ly away, 130 ly in diameter and contains about 100,000 stars. M15 has a very dense, compact central core, more so than any other globular cluster.