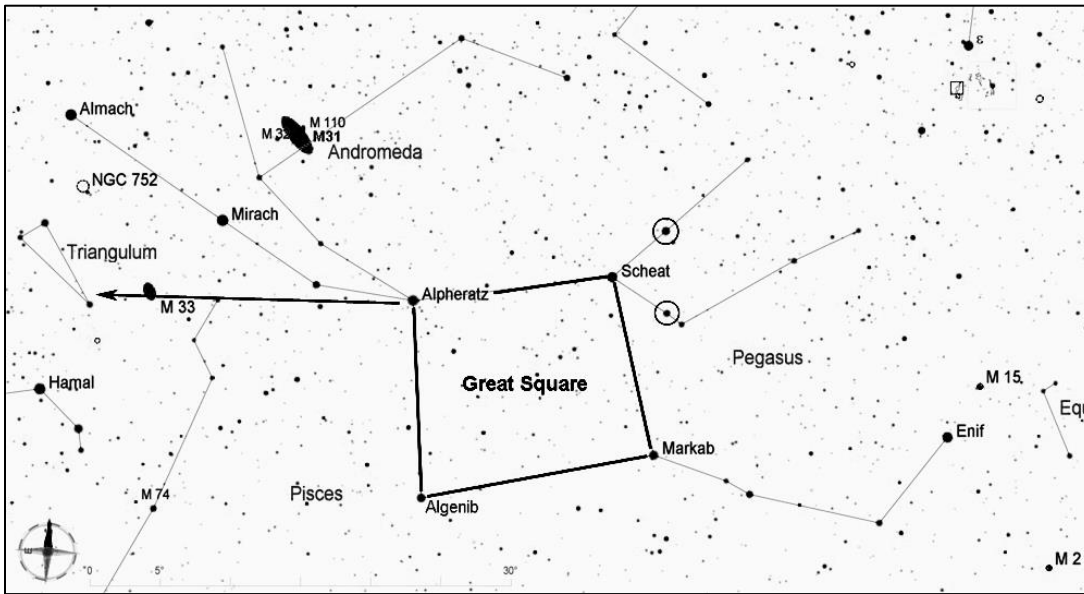


## Mesarthim (Gamma Aretis), Double Star in Aries

This is a pair of white or blue-white stars of about equal brightness and about 7 arcseconds apart, making a nice sight in even a telescope. Both of these stars are more than twice as massive as our Sun and about 50 times as luminous. The distance between them is 357 astronomical units, and their orbital period is more than 5000 years.



Start by finding the Great Square of Pegasus, which rises in the eastern sky during the early fall evenings, is high overhead later in the fall, and sinks in the western sky during early winter. To be sure you know how the square is oriented in the sky, look for the two stars outside the northwest corner of the square (circled in the chart here) that form a small triangle with Scheat.

Using the northern edge of the Great Square as a pointer, extend a line to the east about twice the size of the Square, and you will arrive in the vicinity of the constellation Triangulum, whose 3 brightest stars form a

long and narrow triangle.

From Triangulum, look about 10 degrees to the south for three bright stars in the constellation Aries--Hamal, Sheratan and, farthest to the southwest, Mesarthim. The combined magnitude of the two components of Mesarthim is about 3.9, making it easy to spot with the naked eye. Use a telescope at medium to high power to get a nice view of this pretty double star.

