

CENTAURUS'S RITUAL



Orion seeks help from the Centaurs. Chiron, leader of the centaurs, says that they're willing to help fix Polaris, but only after Orion participates in a traditional centaur ritual, and records the start and finish of each centaur.

The ritual takes place on the crossroads of four roads, with a circular road surrounding the central intersection. Eight stables are placed, one at each end of each road. Before the ritual, there is one centaur in each stable, numbered from 1 to 8 in some order. At each step of the ritual, the centaurs move one step to an adjacent intersection, with no intersection containing more than one centaur and no two centaurs crossing paths. Over the last two steps of the ritual, all centaurs return to stables, with two centaurs ending in the southern stable, no centaurs in the eastern stable, and one centaur each in all remaining stables. The intermediate steps of the ritual are shown below, with sums between all adjacent pairs of centaurs.

