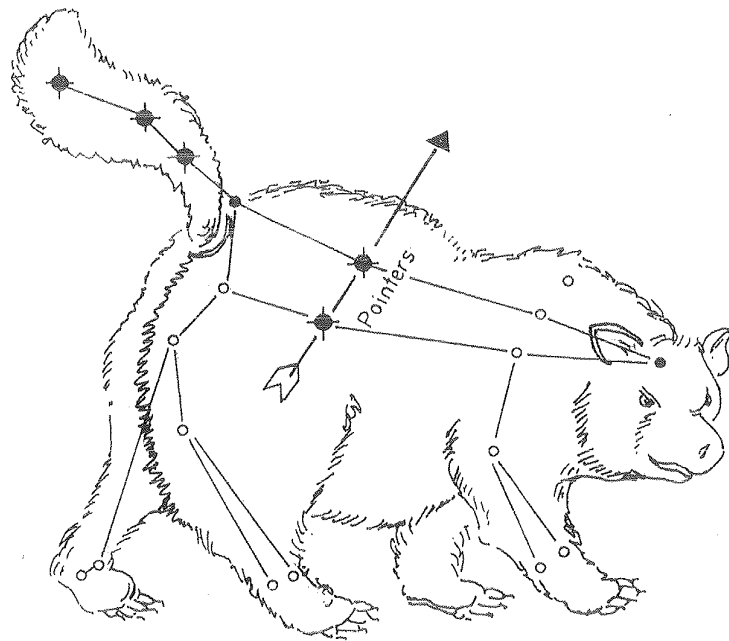


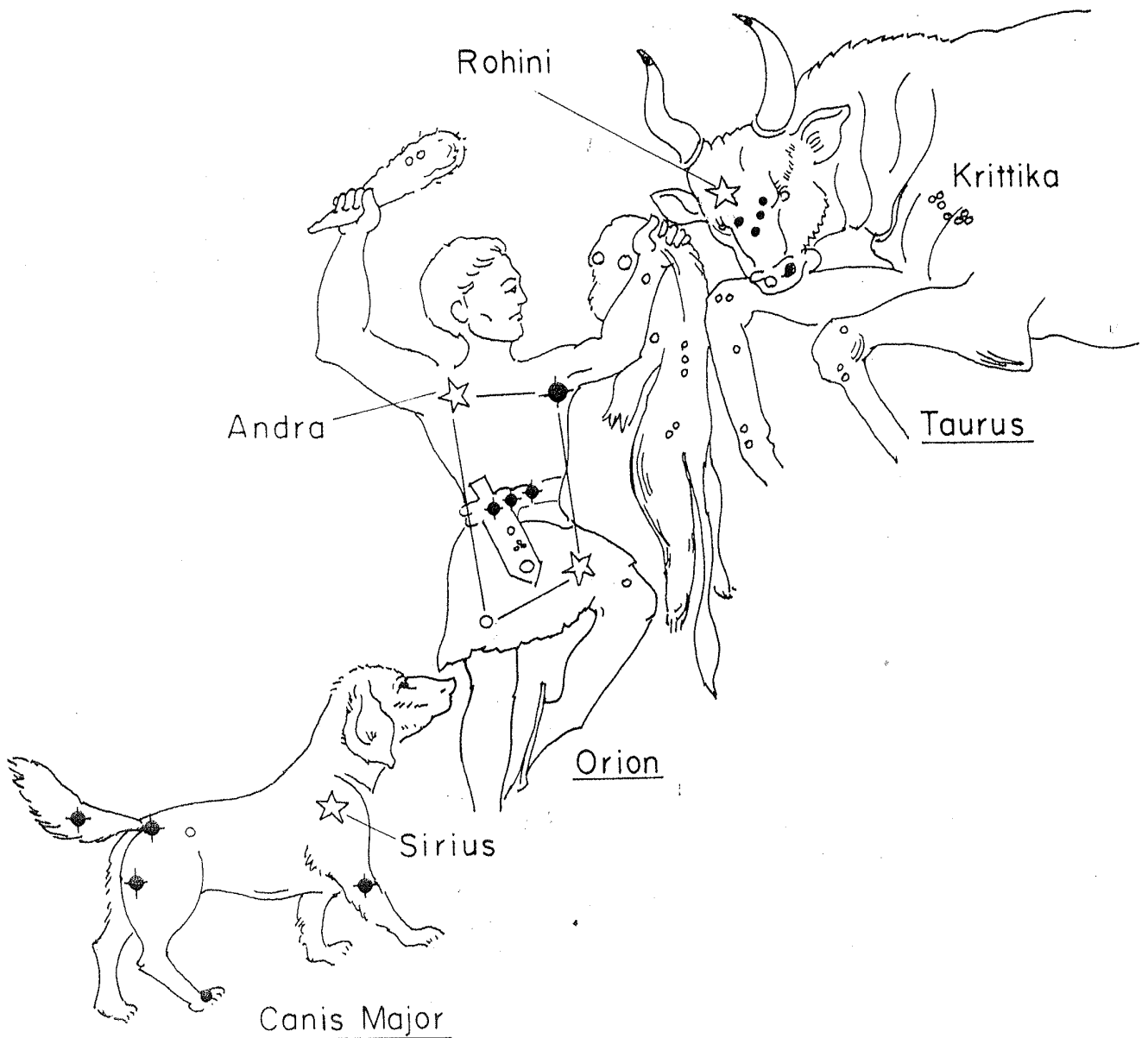
Box .2 Shapes of Constellations

Constellations are the patterns that sky-watchers from ancient days have made from groups of stars in the sky. Imaginative people have associated figures of animals, human beings and other objects with constellations of stars. For example one can associate the figure of a big bear with the 'Saptarshimandala' or 'Great bear' constellation as illustrated below.



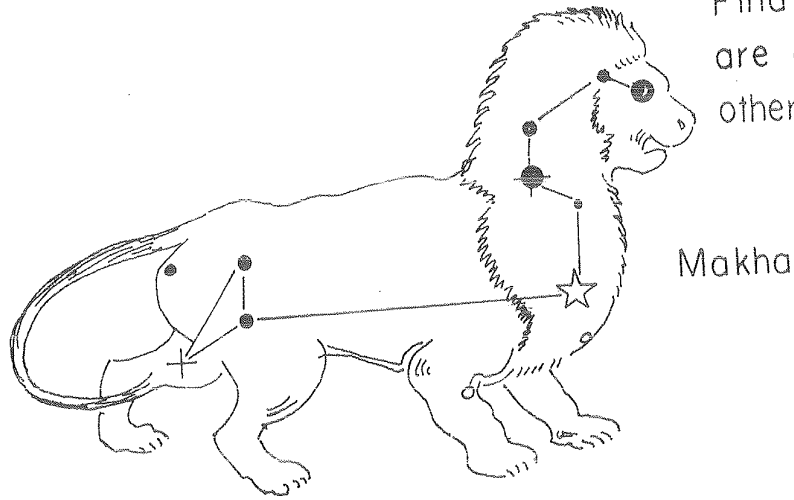
'Great bear' or 'Saptarshimandala'

Similarly one can associate the figure of a hunter with Orion (Mahavyadha), a bull with Vrishabha (Taurus) and a dog with 'Canis major' as shown below . It is as if the hunter is raising his mace to fight with the charging bull. You can imagine a dog following the hunter.

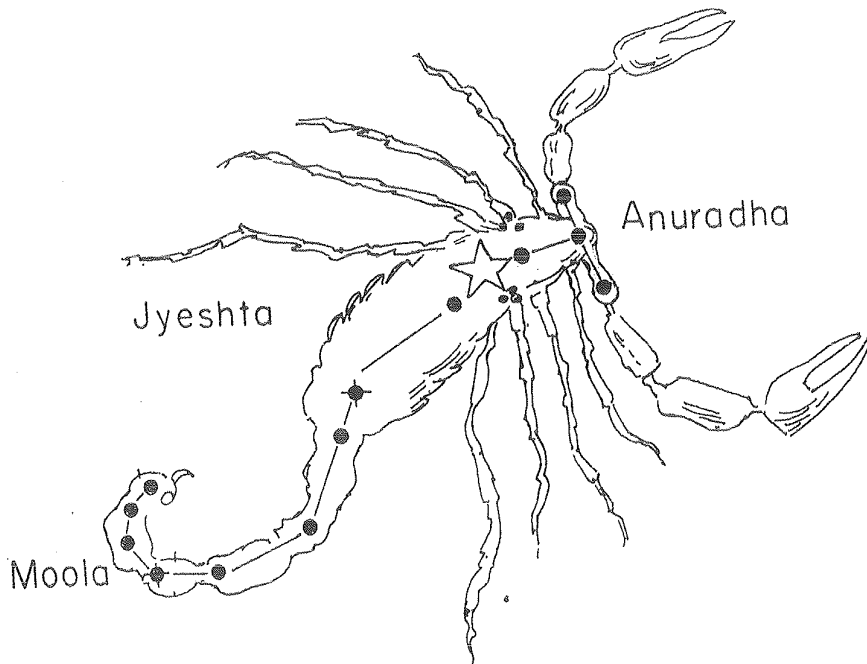


Likewise, one can draw a figure of lion around the stars in the Simha (Leo) constellation, a Scorpion around Vrishchika (Scorpio), an eagle around Garuda (Aquila) and a winged horse around Pegasus.

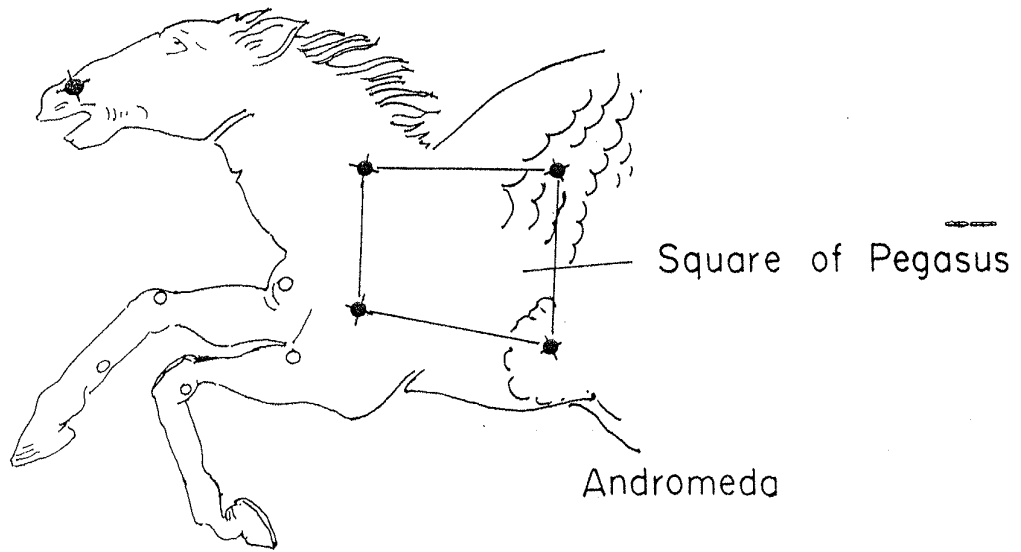
Find out what figures are associated with other constellations.



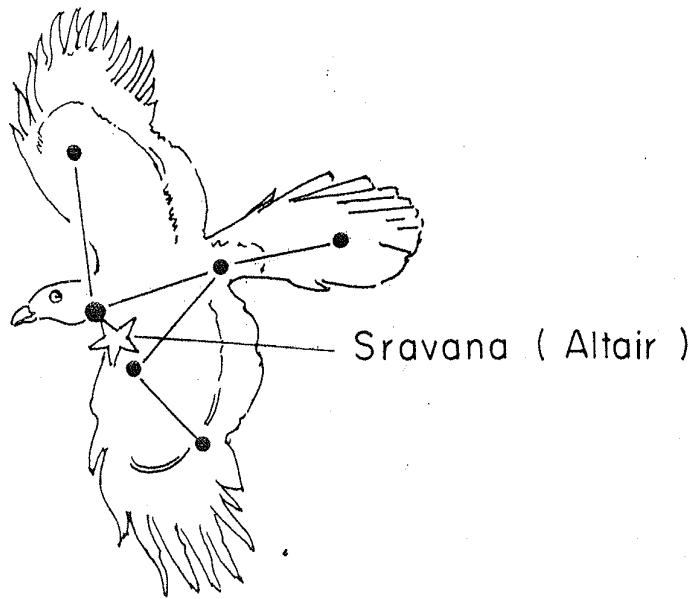
Simha (Leo)



Vrishchika (Scorpio)



Pegasus



Garuda (Aquila)

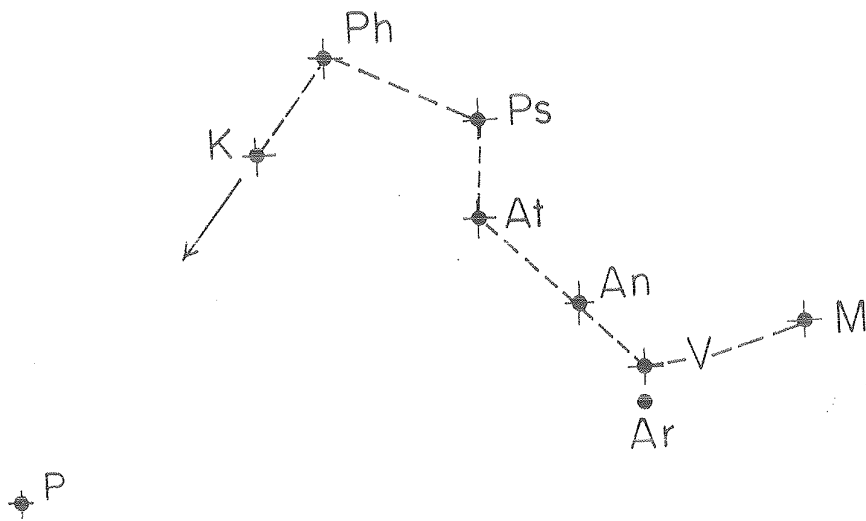


Fig.1.2 Saptarshi mandala and its relation to the pole star, Dhruva. The stars Marichi (M), Vasishta (V), Angirasa (An), Atri (At), Pulastya (Ps), Pulaha (Ph) and Kratu (K) constitute the Saptarshi mandala. Arundhati (Ar) is near Vasishta (V). When you extend the lines joining Ph and K it will meet Dhruva (P). Pulaha and Kratu are called pointers as they point towards Dhruva.

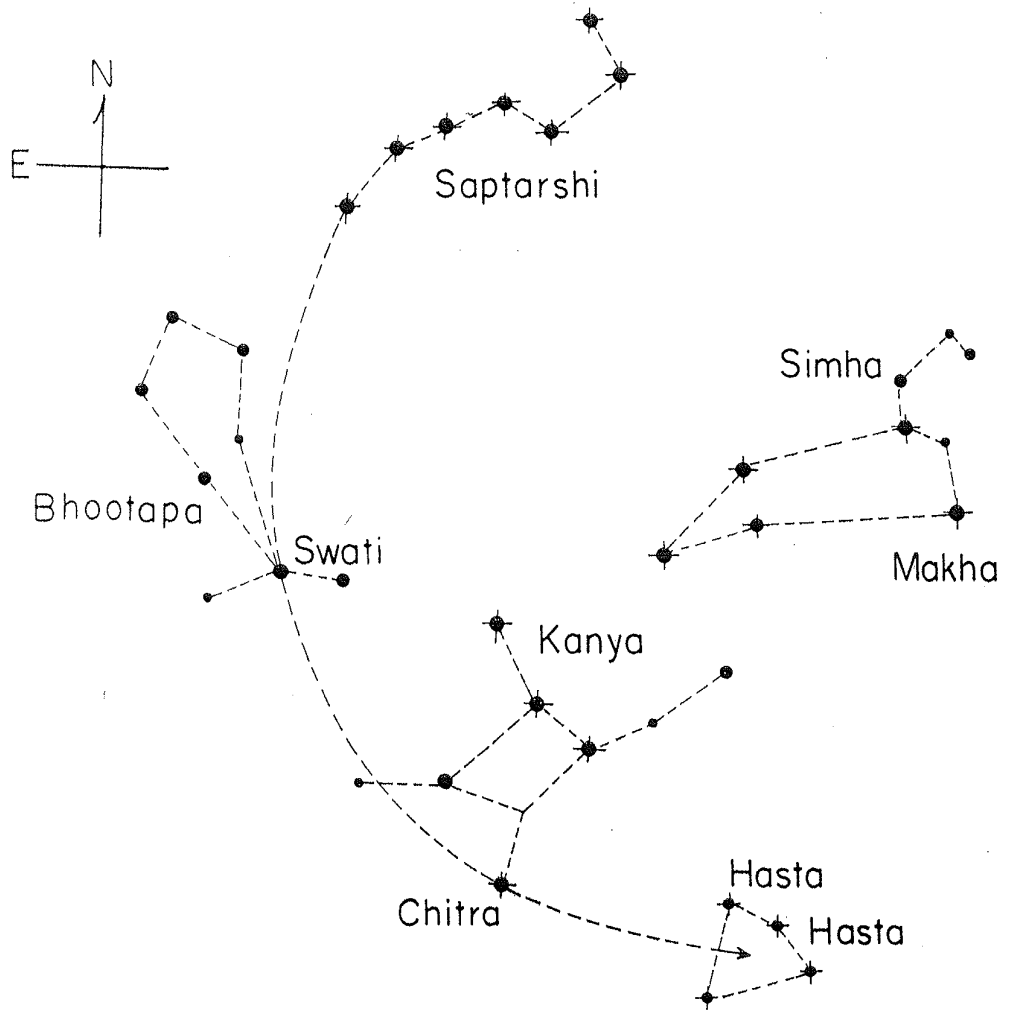
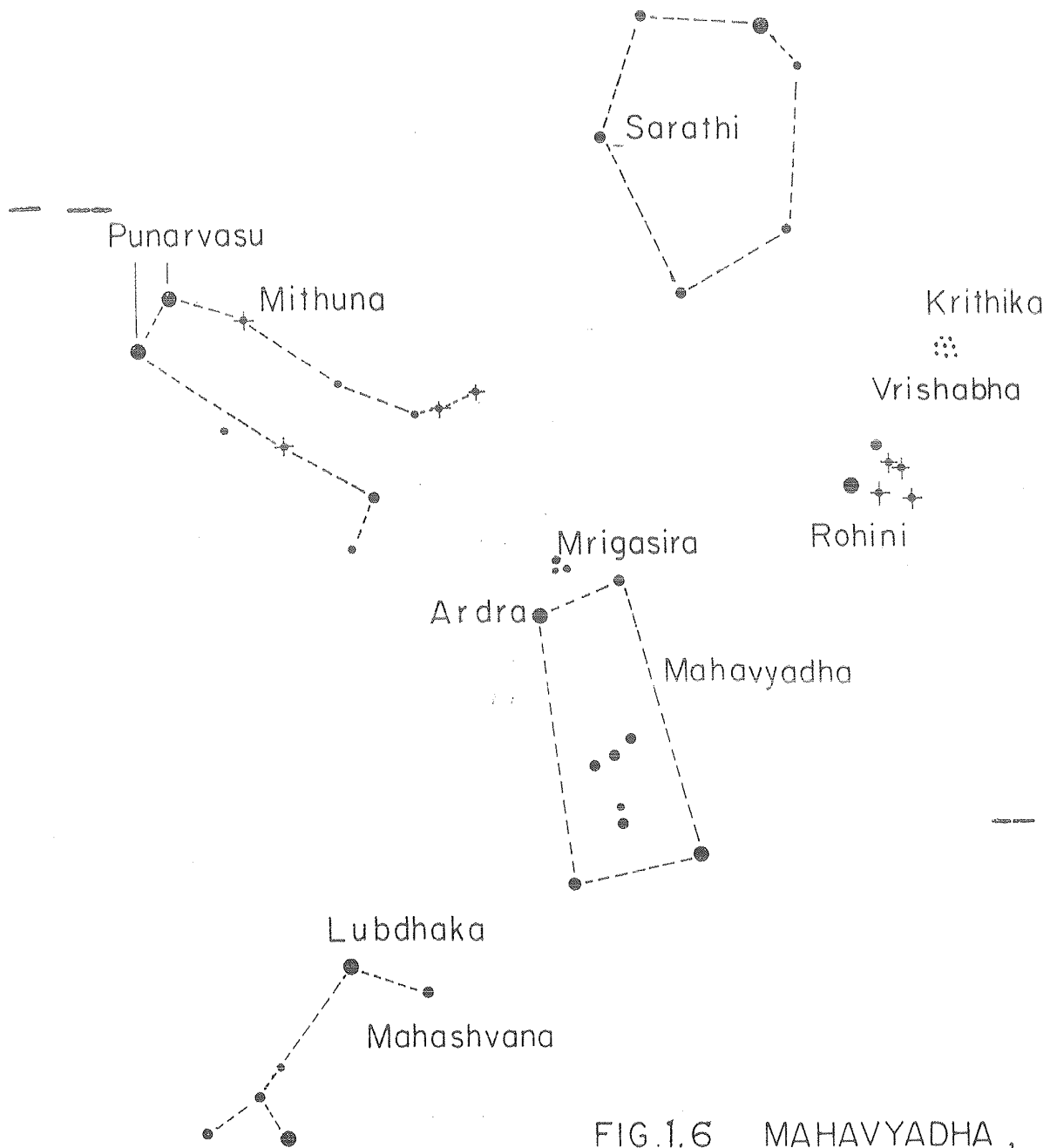


Fig.1.3 Saptarshi mandala , Bhootapa , Kanya , Hasta and Simha constellations. Prominent stars (Swathi , Chitra , Hasta and Makha) are indicated. You have to hold the figure above your head such that N , E , ... point to the actual North , East etc.



• Agastya

FIG.1.6 MAHAVYADHA ,
MAHASHVANA ,
VRISHABHA ,
MITHUNA , SARATHI
AND AGASTYA .

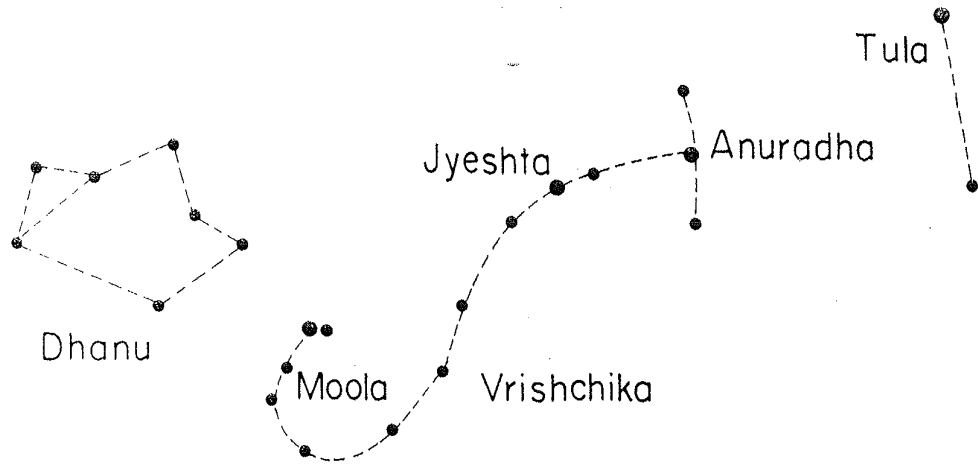


Fig.1.7 Vrishchika, Tula and Dhanu.

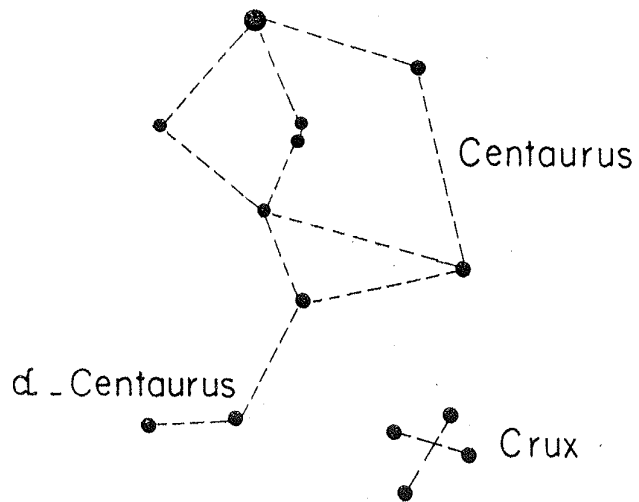
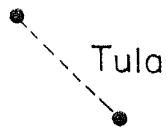


Fig.1.8 Centaurus and Crux .