



## Zodiacal Constellation Star Distances

**The 3-D Nature of Constellations:** When we look at the night sky, we cannot tell how far away the stars and the planets are. In our orrery activity, we are limited to how far we can place the constellations. Below are the constellations of the zodiac, the three brightest stars in each and their distances. With the naked eye, in suburban areas, you can see down to magnitude 4 or 5. For the stars in the constellations of the zodiac, at magnitude 4.0, this is 120 stars. There are 12 stars less than 60 light years away. The closest star is 17 light years away, while 5 stars are over 1,000 light years away, with the farthest star is over 3,000 light years away.

Constellation	Brightest Stars	Magnitude	Dist. (LY)	Dist. km 1m=1 AU
		Apparent, Absolute		
Pisces	Eta Piscium (Alperg)	3.62, -1.16	294	18,600
	Gamma Piscium (Simmah)	3.70, 0.68	138	8,700
	Omega Piscum (Vernalis)	4.03, 1.07	106	6,700
Aries	Alpha Arietis (Hamal)	2.01, 0.48	66	4,200
	Beta Arietis (Sheratan)	2.64, 1.33	60	3,800
	41 Arietis (Bahrani)	3.61, 0.16	159	10,000
Taurus	Alpha Tauri (Aldebaran)	0.75, -0.63	65	4,100
	Beta Tauri (El Nath)	1.65, -1.37	131	8,300
	Eta Tauri (Alcyone)	2.85, -2.41	368	23,000
Gemini	Beta Geminorum (Pollux)	1.16, 1.09	34	2,200
	Alpha Geminorum (Castor A)	1.90, 0.59	52	3,300
	Gamma Geminorum (Alhena)	1.93, -0.60	105	6,600
Cancer	Beta Cancri (Al Tarf)	3.53, -1.22	290	18,000
	Alpha Cancri (Asellus Australis)	3.94, 0.84	136	8,600
	Iota Cancri	4.03, -0.77	298	19,000
Leo	Alpha Leonis (Regulus)	1.36, -0.52	77	4,900
	Gamma Leonis (Algieba)	2.01, -0.92	126	8,000
	Beta Leonis (Denebola)	2.14, 1.92	36	2,300
Virgo	Alpha Virginis (Spica)	0.98, -3.55	262	17,000
	Gamma Virginis A (Porrima)	2.74, 2.38	39	2,500
	Epsilon Virginis (Vindemiatrix)	2.85, 0.37	102	6,500
Libra	Beta Librae (Zubeneschamali)	2.61, -0.84	160	10,000
	Alpha Librae (Zubenelgenubi)	2.75, 0.88	75	4,700
	Sigma Librae (Brachium)	3.25, -1.51	292	18,000
Scorpius	Alpha Scorpii (Antares)	1.06, -5.28	604	38,000
	Lambda Scorpii (Shaula)	1.62, -5.05	703	44,000
	Theta Scorpii (Sargas)	1.86, -2.75	272	17,200
Ophiuchus	Alpha Ophiuchi (Ras Alhague)	2.08, 1030	47	3,000
	Eta Ophiuchi (Sabik)	2.43, 0.37	84	5,300
	Zeta Ophiuchi (Han)	2.54, -3.20	458	29,000
Sagittarius	Epsilon Sagittarii (Kaus Australis)	1.79, -1.44	145	9,200
	Sigma Sagittarii (Nunki)	2.05, -2.14	224	14,000
	Zeta Sagittarii (Ascella)	2.60, 0.42	89	5,600
Capricornus	Delta Capricorni (Deneb Algedi)	2.85, 2.49	39	2,500
	Beta Capricorni (Dabih)	3.05, -2.07	344	22,000
	Alpha Capricorni (Algedi)	3.58, 0.97	109	6,900
Aquarius	Beta Aquarii (Sadal Suud)	2.90, -3.47	612	39,000
	Alpha Aquarii (Sadal Melik)	2.95, -3.88	758	48,000
	Delta Aquarii (Skat)	3.27, -0.18	159	10,000

