

Item	Date	Time	Cross	Staff	tan x	arctan x	Angle
Polaris and the Horizon	3/9/2023	8:14 PM	12	15.9375	0.376471	0.395941	45.4
Polaris and the Horizon	3/10/2023	8:53 AM	12	17.5625	0.341637	0.355945	40.8
Length of Orion's Belt	3/7/2023	7:56 PM	1.5	34.75	0.021583	0.021586	2.474
Length of Orion's Belt	3/9/2023	7:13 PM	1.5	33.8125	0.022181	0.022185	2.542
Betelgeuse and Rigel	3/7/2023	8:07 PM	8	24.4375	0.163683	0.165169	18.9
Betelgeuse and Rigel	3/9/2023	7:05 PM	7	21.40625	0.163504	0.164984	18.9
Castor and Pollux	3/7/2023	7:50 PM	1.5	22.125	0.033898	0.033911	3.9
Castor and Pollux	3/9/2023	7:19 PM	2	27.875	0.035874	0.03589	4.1
3 Stars of Summer Triangle							
Deneb and Vega	3/13/2023	4:48 AM	9	21.6875	0.207493	0.21055	24.13
Deneb and Altair	3/13/2023	4:54 AM	12	17	0.352941	0.368799	42.26
Vega and Altair	3/13/2023	5:02 AM	12	18.1875	0.329897	0.342713	39.27
Two Planets at Conjunction							
Venus and Jupiter	3/5/2023	6:11 PM	2	31.5	0.031746	0.031757	3.64
			Inches	Inches		Radians	Degrees

Actual Angle

39.9	Broomfield on a hill-Horizon hard to tell
39.9	Broomfield from my backyard
2.736	Standing Up
2.736	Sitting Down
18.5	
18.5	Sitting Down
4.3	
4.3	Sitting Down
24	
38	
34	

Degrees