

Step 3	Measurements from My Analemma	Value
	h - Needle Height (Inches)	8 5/16 8.31
	Distance to Summer Solstice Point (inches)	2 7/16 2.44
	Distance to Winter Solstice Point	16 25/32 16.78
	Calculate the Altitude of Sun at the Summer and Winter Solstices	
Step 4	Altitude Summer Solstice (degrees)	73.66
	Altitude Winter Solstice (degrees)	26.35
	Specify the Relationships between the Altitude of the Sun at Summer Solstice, the Tilt of the Earth's Axis and the Observer's Latitude	
Step 5	ObsLatitude – TiltOfAxis (degrees)	16.34
	Specify the Relationships between the Altitude of the Sun at Winter Solstice, the Tilt of the Earth's Axis, and the Observer's Latitude	
Step 6	ObsLatitude – TiltOfAxis (degrees)	63.65
	Specify the Observing Latitude by adding the equations from Step 4 and Step 5	
Step 7	Calculated Observers Latitude (degrees)	40.00
	Actual Observers Latitude (degrees)	39.93
	Specify the Tilt of the Earth's Axis by subtracting the equation from Step 4 from the equation from Step 5	
Step 8	Calculated Tilt of Earth's Axis (degrees)	23.65
	Actual Tilt of Earth's Axis (degrees)	23.44