

Distance, Kinematic & Isometry in Geometry

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The idea for this project was thought during an international conference 20-24 May 2013 in Uzbekistan and performed until 2 January 2014 in Turkey and completed on 20 January 2014 in Iraq. As it is well known; Geometry, a subject with which we are all familiar from high school, investigates properties of figures in the plane or in space. We know that the study of geometry goes back at least four thousand years, as far back as the Babylonians (2000 to 1600 BC). Their geometry was empirical, and limited to those properties physically observable. The 19th century was a period of rapid development in geometry. In 1982, modern definition of geometry was given by W.P. Thurston, and this definition will be our guide in this paper. Firstly, In this paper we are going to prove that the idea of distance in geometry is larger than the idea of metric in mathematics. Secondly, by this paper students will learn and apply the proof of the idea that we mentioned above.