

Abstract:

This work is intended for high school and university students and their teachers who want to learn or improve their knowledge about affine transformations and perspective collineation. In this work the reader acquainted with the ideal elements, dividing ratio and cross ratio. The main part of the work is perspective collineation and affine transformations, their definitions, properties, specificity and finding other elements. This work also deals with the use of affine transformations and perspective collineation in descriptive geometry. The text is supplemented with illustrative images, applets and step-by-step images that are created with GeoGebra software.

Keywords: affine transformations, perspective collineation, ideal elements, cuts of solids, dividing ratio, cross ratio