

Abstract

Title: Utilization of the internet by teaching conics at high school

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Abstract

This diploma thesis is dealing with conics' problems. It is mainly destined for high school (or university) teachers of descriptive geometry and for students too. It can be used in aid of education of conics or by self-study, because it includes many of illustrative pictures and dynamic applets made in the program GeoGebra, which support the written theoretical text. In the work are enumerated definitions, properties and various constructions of individual conics. Further there is their origin as an intersection of a right circular cone (as the case may be of a right circular cylinder) with a plane, their osculating circle and conjugate diameters. Compilation of examples constitutes an addition of this work. The examples have various difficulty and also can serve as a control over got knowledge.

Keywords: ellipse, hyperbola, parabola, foci, tangents, normals, construction of conics