Diploma thesis is divided into three chapters. In first chapter are explained elementary ideas of kinematic geometry in the plane included not just images but also dynamic files made in software GeoGebra. Second chapter is about specific motions in the plane. It describes construstion of the curves in synthetic and analytic way. Every motion has its own file with animation of that motion. Last chapter devoted to history of some curves and also to aplication of kinematic geometry in real life. This thesis is useful for university students of descriptive geometry, but it also may help as motivation for high school students, mainly students of technical schools.