My bachelor thesis Anaglyphs and their application in teaching stereometry deals with anaglyphs and their creation. It gives information about linear perspective, which is necessary for the creation of anaglyphs. The terms of linear perspective are explained as well as the methods we can use in constructions of this projection. The thesis is mainly devoted to anaglyphs and their creation by the tools of descriptive geometry - central projection and especially linear perspective. Types of anaglyphs, drawing of anaglyphs and the possibility of constructing anaglyphs by software are mentioned. The third chapter deals with stereometry and it uses anaglyphs to support the spatial imagination. There are two versions of the third chapter - each one uses different types of anaglyphs to show the same problems of stereometry. 3D red cyan glasses are enclosed to the thesis as well as a CD containing both versions of the thesis and two files showing the creation of anaglyphs. The thesis is meant to be used by teachers and students in teaching and studying stereometry.