

Abstract: The present thesis deals with geometric lighting and methods of its construction. In particular, it is aimed at parallel and central lighting of objects and groups of objects. The work includes a theoretical part, in which you can learn about the properties, methods and basic concepts related to geometric lighting. Afterwards, there is a practical part, which contains a set of examples in different projections with their solutions and visual pictures. Last chapter is about using computer for modeling of geometric lighting; mainly it is about possibilities of software Rhinoceros. In addition, the chapter contains modeled lighting of the charming Taj Mahal. The project is filled up with a number of pictures to enhance the reader's imagination about the principles and methods of lighting. In the work I emphasized intelligibility and usability of the methods listed there. In general, thesis *Geometry of shadows* is devoted to everybody who wants to learn more about the geometry of shadows. The thesis could be a useful study material for students and teachers of descriptive geometry. The work also includes the DVD, which contained Rhinoceros files of images, worksheets with examples solved at the work and the thesis in electronic form.