

APPLICATIONS ILLUSTRATING COMMON INTERSECTIONS OF SOLIDS IN TEACHING TECHNICAL DRAWING

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Abstract: The proposed paper intends to present applications developed in 3D Studio MAX program. The didactical aim of these applications in teaching descriptive geometry and technical drawing is to provide a clear and appropriate understanding of the common intersections of solids, frequently met in drawing different types of parts. In the paper, the rendering and the mapping techniques developed in 3D Studio MAX are used for illustrating common intersections of solids in teaching technical drawing. The increased realism of the scenes created help students understand the shapes of solids which intersect and the shapes of intersections between solids; also, the projections of the intersection of solids are presented in parallel with the three dimensional view of the intersection of the solids considered.

Key words: Intersection of solids, technical drawing, 3D Studio MAX.