

Model 160/27 illustrates the **orthogonal projection of a circle k , the axis, centre, and radius of which are given.** The model shows further the orthogonal projection of a right circular cone and a right cylinder; both solids (their bases are congruent to the first mentioned circle) can be applied onto the axis of the circle.

Model 161 a / 77 a shows a **plane section of a right triangular prism**; the plane of intersection Σ being not parallel to any edge of the prism. Further the model contains the horizontal plane through the upper base triangle, which intersects Σ in a horizontal line. The intersection points of the lower and the upper edges of the prism with the traces of Σ and the horizontal lines resp. are drawn, in order to make clear the construction of the intersection polygon of Σ with the prism.

The upper portion of the prism above Σ can be uplifted and Σ and the horizontal plane be put down into the base plane. There is an **affine correspondence between the base triangle and the put down intersection polygon.**

Instead of the right an **oblique prism** can be delivered (**Model 161 b / 77 b**).

Model 162/78 shows the **plane section of a triangular pyramid**; the intersection plane Σ is not parallel to any edge of the pyramid, it stands on its trace s in the base plane and is inclined towards the latter.

Further the model contains the horizontal plane through the apex S of the pyramid and its intersection line h with Σ . The intersection points of the edges of the base of the pyramid with s are drawn in the model, further the intersection points of the parallels to the base edges through S in the horizontal plane with h . Thus the model contains all auxiliary lines necessary for the construction of the intersection polygon.

The top of the pyramid above Σ can be uplifted and Σ and the horizontal plane can be put down into the base plane, in order to demonstrate the **perspectivity in the plane.**