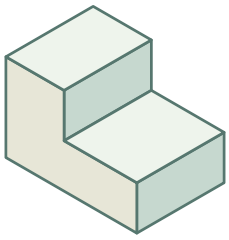
Orthographic Projection Method

Reference I Worked example I LETTER

Original prompt

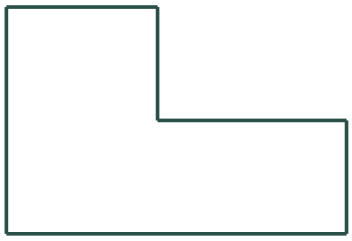
A stepped block: rectangular base with a smaller rectangular step on top, offset to the left. Construct its front, top and right-side orthographic views using the five-step method.



Full-depth left step



Top



Front



Right side

Answer

The left step makes an L-shaped front outline. The top view is a rectangle split at the step's width. The right view is a rectangle with a solid line at the height of the lower base.

Reasoning

The views share the matching dimensions. The front and top share width, the front and right share height, and the top and right share depth. Use the alignment to transfer each coordinate to the view where that coordinate is visible.

Check

Trace each edge of the object and confirm it appears in the correct views at the correct position; confirm hidden edges are dashed and no extra edges are drawn.