Construction Lines in Orthographic Projection

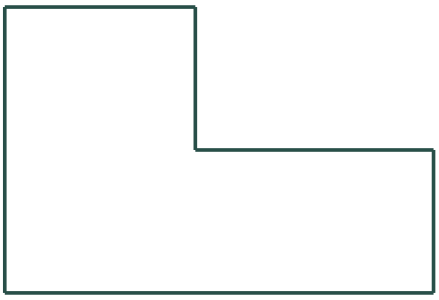
Student | Plate 1 of 4 | A4

Original prompt

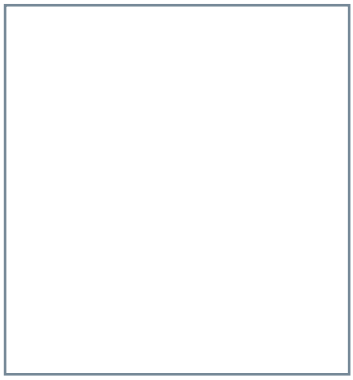
Plate 1: The front view shows a step (a change in height) on the right side. Build the side view using construction lines.

Given solid

Model: 9 wide and uniformly 5 deep. From left, the first 4 units are 6 high and the last 5 units are 3 high.



Front



Right side (your drawing)

Show your guide lines and record the check

Construction Lines in Orthographic Projection

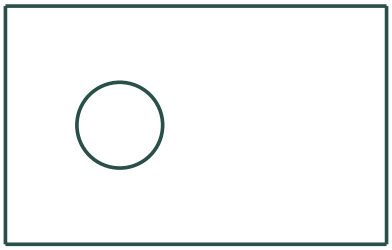
Student | Plate 2 of 4 | A4

Original prompt

Plate 2: The top view shows a hole offset to the left. Build the front view using construction lines.

Given solid

Model: 8 wide, 5 deep, 6 high. A vertical cylindrical bore has radius 0.9. Its axis is 2.4 from the left and 2.5 back from the front.



Top



Front (your drawing)

Show your guide lines and record the check



Construction Lines in Orthographic Projection

Student | Plate 3 of 4 | A4

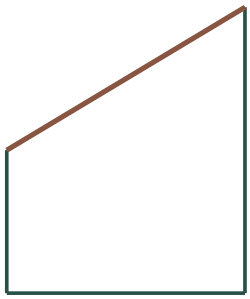
Original prompt

Plate 3: The side view shows a slanted edge. Build the top view using construction lines.

Given solid

Model: the wedge is 8 units across and 5 deep. The top rises from 3 high at the front to 6 high at the back across the full width. Transfer the marked outside right edge.

Top (your drawing)



Right side

Slant on the outside right

Show your guide lines and record the check

Construction Lines in Orthographic Projection

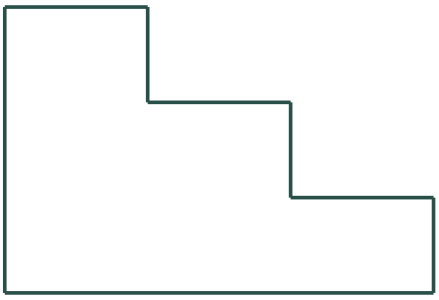
Student | Plate 4 of 4 | A4

Original prompt

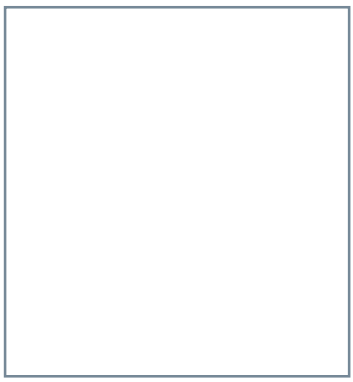
Plate 4: The front view shows a block with two features at different heights. Build the side view and check both features align.

Given solid

Model: 9 wide and uniformly 5 deep. The three equally wide bands have heights 6, 4 and 2 units, from left to right.



Front



Right side (your drawing)

Show your guide lines and record the check