Sculpture Drawing: Form and Viewpoint Study

Topic reference / ordinary illustration



Ordinary topic reference. Hypothetical dimensions in the four tasks are supplied in their own text; this illustration is not their measured answer.

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Worked example / complete source key

A block-based sculpture measures 60 units wide, 30 units deep, and 80 units high. One feature is at x = 20 from the left, y = 10 from the front, and z = 40 above the base. Use u = x + 0.5y and v = z + 0.5y to place it in the oblique view, then give one check.

Answer: Substitute the coordinates: u = 20 + 0.5(10) = 25 and v = 40 + 0.5(10) = 45. Plot the feature 25 units right of the projected origin and 45 units above it. The overall projected bounds are u = 0 to 75 and v = 0 to 95 under this convention, so the point lies inside them.

Reason: The side view supplies y = 10 while the front view supplies x = 20 and z = 40. Each unit of depth adds one-half unit to both projected coordinates.

Check: Recalculate 0.5 × 10 = 5, then confirm u = 20 + 5 = 25 and v = 40 + 5 = 45. Confirm 25 is between 0 and 75 and 45 is between 0 and 95.