Loomis Head Construction: Sphere, Planes, and Feature Placement

Original tasks 1, 2 / independent work

Task 1

A sphere has diameter 12 cm. The brow line is at the horizontal center. The chin is 6 cm below the sphere bottom. Calculate the distance from brow line to chin and the nose base position.

Task 2

For a 12 cm sphere, the brow line is at the horizontal center and the chin is 6 cm below the sphere bottom. The nose base is halfway from brow to chin. Find the mouth line if it is one-third of the distance from the nose base to the chin.

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Original tasks 3, 4 / independent work

Task 3

A learner draws side planes 2 cm in from each edge of a 12 cm sphere. The radius is 6 cm. Is this about one-third of the radius?

Task 4

A 10 cm sphere has its brow line at the horizontal center and its chin 5 cm below the sphere bottom, so the brow-to-chin distance is 10 cm. A draft places the eyes on the brow line, the nose base 4 cm below the brow, and a vertical ear-position marker on the face axis. Identify and correct all three placements.