How to Draw Gemstone Scales: Overlapping Facet Rows

Ordinary topic reference / separately checked pixels



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Original worked example / unchanged complete key

Prompt: Construct three overlapping facet rows on a 60 mm wide area using w = 20 mm and h = 15 mm (hypothetical). Row 0 starts at the left edge. Describe the placement and check the overlap.

Answer: Row 0: top edges on guide 0 at 0, 20, and 40 mm; midpoints at 10, 30, and 50 mm. Lower points at 15 mm below guide 0. Row 1: guide 1 at 15 mm below guide 0; offset by w/2 = 10 mm, so midpoints at 0, 20, 40, and 60 mm (the 0 mm and 60 mm scales are half-clipped at the 60 mm borders). Row 2: guide 2 at 30 mm below guide 0; aligned with row 0 midpoints at 10, 30, and 50 mm. Check: each row 0 lower point sits between two row 1 top edges; each row 1 lower point sits between two row 2 top edges. Total width for row 0 is 3 × 20 = 60 mm. Offset is 10 mm, which is w/2.