Realistic Glass Drawing: Rim Ellipse, Refraction, Cast Shadow

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 clear glass is viewed from slightly above. The rim appears 90 mm wide and 30 mm high. The base appears 90 mm wide and 18 mm high. Light comes from the upper right. Describe the rim ellipse, base ellipse, refraction lines, and cast shadow placement.

Answer: Rim ellipse: half-width 45 mm, half-height 15 mm, ratio 3 to 1. Base ellipse: half-width 45 mm, half-height 9 mm, ratio 5 to 1. Draw both centered on the same vertical line. Refraction: two light lines from the rim edge to the water line, shifting slightly at the glass wall. Cast shadow: extends to the lower left, about 70 mm long and 35 mm wide, touching the base ellipse and tapering away. Contact shadow directly under the base is darkest.