Fish Eye Drawing: Iris, Pupil, and Highlight Geometry

Original task 1 / independent drawing and calculation

Task 1

Draw an iris circle with diameter 40 mm and a round pupil with diameter 12 mm. Place a single circular highlight of diameter 5 mm in the upper-right quadrant, with the light direction stated as upper right. Measure and record the pupil-to-iris ratio and the highlight center offsets from the eye center.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 2 / independent drawing and calculation

Task 2

Draw an iris circle with diameter 60 mm and a vertical slit pupil whose width is 8 mm and height is 30 mm, centered on the iris center. Place an oval highlight in the upper-left quadrant. State the light direction and check the iris ring width at top, bottom, left, and right.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 3 / independent drawing and calculation

Task 3

Draw an iris circle with diameter 45 mm and an oval pupil with horizontal diameter 15 mm and vertical diameter 20 mm, centered on the iris center. Place two small highlight circles in the upper-left quadrant and state that the light direction is upper left. Check the pupil-to-iris ratio using the horizontal diameter and confirm both highlights are in the correct quadrant.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

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Original task 4 / independent drawing and calculation

Task 4

Draw an iris circle with diameter 50 mm and a round pupil with diameter 18 mm. Place a highlight in the lower-right quadrant and state that the light direction is lower right. Add labels for iris, pupil, and highlight using the baseline-to-midline x-height convention. Measure your lowercase x-height and record it.

Keep the original task measurements. Use the full drawing sheet in this PDF for a response needing more room; use the stated paper size when a task specifies larger paper.

Full drawing sheet / reusable blank workspace

Reusable full drawing sheet for Tasks 1 to 4. Print another copy when needed. Keep all original task measurements; if a task specifies larger paper, use that paper size.