Portrait Drawing from Photo References: A Structured Practice Guide

Original tasks 1, 2, 3 / complete keys

Task 1

Plate A: head height 10 cm, width 8 cm, eye line 5 cm from chin. Box height 20 cm. State a convention, compute scale factor, and give scaled head height, width, and eye line from chin.

Answer: Convention: eye line at half head height. Scale factor = 20/10 = 2. Scaled height = 20 cm; width = 16 cm; eye line from chin = 10 cm. Check: 10 is half of 20.

Reason: Scale factor is box height divided by plate head height. Multiply each measurement by the factor. The eye line check confirms the convention.

Check: Re-multiply 10 x 2, 8 x 2, and 5 x 2; verify eye line is half of scaled height.

Task 2

Plate B: head height 14 cm, width 10 cm, nose base 4 cm above chin, eye line 7 cm above chin. Box height 21 cm. Compute scale factor and scaled nose base and eye line distances from chin. Does the nose base fall halfway from eye line to chin under the stated convention?

Answer: Scale factor = 21/14 = 1.5. Scaled eye line = 7 x 1.5 = 10.5 cm. Scaled nose base = 4 x 1.5 = 6 cm. Halfway from eye line to chin would be 10.5/2 = 5.25 cm; the plate shows 6 cm, so it deviates by 0.75 cm. Note the deviation.

Reason: Compute scale factor, multiply distances, then compare nose base to half the eye line distance. The deviation is valid and should be noted.

Check: Verify 14 x 1.5 = 21; 7 x 1.5 = 10.5; 4 x 1.5 = 6; 10.5/2 = 5.25; difference 0.75.

Task 3

Plate C: head height 9 cm, width 7 cm, interpupillary distance 3.5 cm. Box height 18 cm. Compute scale factor and scaled interpupillary distance. If your tolerance is plus or minus 0.5 cm on the drawing, is a drawn distance of 7.5 cm acceptable?

Answer: Scale factor = 18/9 = 2. Scaled interpupillary distance = 3.5 x 2 = 7 cm. A drawn distance of 7.5 cm differs by 0.5 cm, which is at the tolerance boundary; acceptable if tolerance is inclusive.

Reason: Scale factor is 2; multiply 3.5 by 2. Compare drawn distance to target and tolerance.

Check: Re-multiply 3.5 x 2 = 7; subtract 7.5 - 7 = 0.5; compare to tolerance.

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Original tasks 4 / complete keys

Task 4

Plate D: head height 11 cm, width 8.5 cm, mouth line 2 cm above chin, nose base 5 cm above chin. Box height 16.5 cm. Compute scale factor and scaled mouth and nose base distances from chin. Under the convention mouth is one-third from nose base to chin; does the plate match?

Answer: Scale factor = 16.5/11 = 1.5. Scaled nose base = 5 x 1.5 = 7.5 cm. Scaled mouth = 2 x 1.5 = 3 cm. One-third from nose base to chin would be 7.5/3 = 2.5 cm; plate shows 3 cm, deviation 0.5 cm. Note the deviation.

Reason: Compute scale factor, multiply distances, then compare mouth to one-third of nose base distance. Deviation is valid.

Check: Verify 11 x 1.5 = 16.5; 5 x 1.5 = 7.5; 2 x 1.5 = 3; 7.5/3 = 2.5; difference 0.5.

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Source rubric / reflection

- [ ] Convention stated in one sentence and labeled on the sheet.
- [ ] At least three measurements recorded with units.
- [ ] Scale factor computed and shown.
- [ ] Feature placements match scaled targets within chosen tolerance.
- [ ] Deviations from convention noted with measurements.
- [ ] Arithmetic checks shown for at least two scaled distances.

Reflection: What did you check, what did you change, and what will you try next?