Upside-Down Bird Drawing: Orientation Practice from an Inverted Contour

Original tasks 1, 2 / complete keys

Task 1

A reference contour is 10 cm wide and 8 cm tall. Draw a tracing box with the same proportions. After tracing, your drawing measures 9.6 cm wide and 7.8 cm tall. Calculate both width-to-height ratios and state whether the difference is within a hypothetical 0.1 tolerance.

Answer: Reference ratio: 10 divided by 8 equals 1.25. Drawing ratio: 9.6 divided by 7.8 equals about 1.23. Difference is about 0.02, within the hypothetical 0.1 tolerance.

Reason: Divide width by height for each. Compare the two ratios by subtraction. The small difference indicates the proportions are close.

Check: Recalculate both divisions and subtract the smaller ratio from the larger. Confirm the result is less than 0.1.

Task 2

An inverted reference shows the tail notch on the left side of the page and the head curve on the right. You draw the tail notch on the right and the head curve on the left. Describe the orientation error and one correction using the rotation guide.

Answer: The drawing is mirrored horizontally. Correction: rotate the drawing 180 degrees, compare the silhouette to the upright reference, and redraw the mismatched outer curve so the tail notch returns to the left side of the inverted view.

Reason: Orientation checking compares the inverted drawing to the reference in the same viewing direction. A left-right swap is a mirror error, not a proportion error.

Check: Place the rotation guide beside the drawing with arrows aligned. Rotate the drawing 180 degrees and confirm the tail notch and head curve match the reference positions.

Upside-Down Bird Drawing: Orientation Practice from an Inverted Contour

Original tasks 3, 4 / complete keys

Task 3

A blank frame is 14 cm by 11 cm. You draw an inverted bird contour that measures 13 cm wide and 9 cm tall. The reference ratio is 1.4. Calculate your drawing ratio and state whether the drawing is too wide, too tall, or close to the reference.

Answer: Drawing ratio: 13 divided by 9 equals about 1.44. Reference ratio is 1.4. Difference is about 0.04, so the drawing is close to the reference and within a hypothetical 0.1 tolerance.

Reason: A ratio above the reference means the drawing is relatively wider; a ratio below means relatively taller. Here the difference is small.

Check: Divide 13 by 9, subtract 1.4, and confirm the absolute difference is less than 0.1.

Task 4

You trace an inverted contour and add one inner wing line. After rotating the page 180 degrees, the silhouette matches the upright reference, but the wing line crosses outside the outer contour. State the mistake and the fix.

Answer: Mistake: the inner wing line extends outside the outer contour. Fix: redraw only the wing line so it stays inside the outer contour and connects at the correct point shown in the reference.

Reason: Inner contour lines must remain inside the silhouette. The orientation check passed, so only the inner line needs adjustment.

Check: Rotate the page 180 degrees and trace the wing line with your eye. Confirm it does not cross the outer contour and that both endpoints match the reference.

Upside-Down Bird Drawing: Orientation Practice from an Inverted Contour

Source rubric / reflection

- [ ] Contour is continuous and closed where the reference is closed.
- [ ] Inverted orientation matches the reference when both are viewed in the same direction.
- [ ] Width-to-height ratio differs from the reference by no more than a hypothetical 0.1.
- [ ] One inner contour line is placed where the reference shows a clear edge.
- [ ] Valid alternatives are accepted if silhouette and orientation remain faithful.
- [ ] Labels use x-height from baseline to midline; letter styles may vary.

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