Gargoyle Drawing: Wing Spread, Horn Taper, and Crouched Posture

Original tasks 1, 2, 3 / complete keys

Task 1

Hypothetical paper: ground line at 3 cm from the bottom, H = 5 cm. Mark the hip midline, shoulder line at 1.2H, and horn-tip line at 2H. State each height from the bottom and one check.

Answer: Hip midline: 3 + 5 = 8 cm. Shoulder line: 3 + 1.2 times 5 = 3 + 6 = 9 cm. Horn-tip line: 3 + 2 times 5 = 3 + 10 = 13 cm. Check: hip minus ground = 8 minus 3 = 5 cm, equal to H.

Reason: Multiply H by the fraction, add the ground offset, and verify the hip distance equals H.

Check: Re-measure each marked line from the bottom edge and confirm the arithmetic in centimeters.

Task 2

A wing guide uses a spine line and two tip points. The left tip is 7 cm from the spine and the right tip is 9 cm. The chosen spread is 8 cm per side. Describe the adjustment and the check.

Answer: Move the left tip outward by 1 cm to 8 cm and move the right tip inward by 1 cm to 8 cm. Check: both tips are now 8 cm from the spine, matching the chosen spread.

Reason: Compare each measured distance to the chosen spread and adjust by the difference.

Check: Measure both tip distances again from the same spine line and confirm both equal 8 cm.

Task 3

Horn checkpoints are base 3 cm, middle 1.5 cm, near-tip 0.8 cm. A draft shows base 3 cm, middle 2 cm, near-tip 1 cm. State which checkpoint fails and give a corrected value that keeps a decreasing taper.

Answer: The middle checkpoint fails because 2 cm is not smaller than the planned 1.5 cm. Correct the middle to 1.5 cm; the near-tip 1 cm is still smaller than 1.5 cm, so the taper decreases. Check: 3 > 1.5 > 1.

Reason: A taper requires each width to be smaller than the previous one; compare the draft to the planned sequence.

Check: List the three widths in order and confirm each is smaller than the one before.

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Original tasks 4 / complete keys

Task 4

Posture block: ground line at 2 cm, hips at 7 cm, knees at 4.5 cm, shoulders at 9 cm. H is 5 cm. Check whether hips equal H above ground and whether knees lie between ground and hips. State the results.

Answer: Hips minus ground = 7 minus 2 = 5 cm, equal to H. Knees at 4.5 cm lie between ground 2 cm and hips 7 cm. Both checks pass.

Reason: Subtract the ground height from the hip height and compare to H; then compare the knee height to the ground and hip heights.

Check: Re-measure the three heights from the bottom edge and repeat the two comparisons.

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Source rubric / reflection

- [ ] Ground line, hip midline, shoulder line, and horn-tip line are marked and labeled.
- [ ] The vertical distance from ground to hip equals the chosen H within the drawing's measurement.
- [ ] Feet are on the ground line and wider than the hip block.
- [ ] Knees fall between ground and hips, and the head sits forward of the chest.
- [ ] Wing tip distances from the spine line match the chosen spread on both sides.
- [ ] Wing membrane is closed between leading and trailing edges.
- [ ] Horn widths decrease from base to near-tip at the marked checkpoints.
- [ ] Construction lines are consistent and checks are recorded before erasing.

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