Draw Creatures in Perspective: Foreshortened Limbs and Body Depth

Original tasks 1, 2 / complete keys

Task 1

A creature's left hind leg points toward the viewer. In side view it is 10 cm long. In your drawing it appears 6 cm. The right hind leg extends sideways and appears 10 cm. The near foot is 4 cm wide; the far foot is 3 cm wide. Check foreshortening and near-far size.

Answer: Left hind leg ratio = 6/10 = 0.6, less than 1, so foreshortened correctly. Right hind leg ratio = 10/10 = 1, not foreshortened, correct for sideways. Near foot 4 cm vs far foot 3 cm: near is larger by 1 cm, consistent with depth.

Reason: Foreshortened limbs have length ratios less than 1; sideways limbs have ratios near 1. Near ends should be larger than far ends.

Check: Measure both limb lengths and both foot widths; compute ratios and compare near vs far widths.

Task 2

A creature's head is near the top of the setup box and its tail recedes toward the VP. The body oval is 12 cm long in side view. In the drawing the body appears 9 cm from chest to tail base. The tail guide line goes toward the VP and the tail appears 4 cm long; in side view the tail is 7 cm. Check body depth and tail foreshortening.

Answer: Body ratio = 9/12 = 0.75, less than 1, so the body shows depth. Tail ratio = 4/7 ≈ 0.57, less than 1, so the tail is foreshortened correctly. Both checks pass.

Reason: A receding body and tail should appear shorter than their side-view lengths; ratios less than 1 indicate depth.

Check: Measure body length and tail length in the drawing and in side view; compute ratios and confirm both are less than 1.

Draw Creatures in Perspective: Foreshortened Limbs and Body Depth

Original tasks 3, 4 / complete keys

Task 3

A creature has one arm reaching forward toward the viewer and one arm raised sideways. The forward arm is 9 cm in side view and appears 5 cm. The sideways arm is 9 cm and appears 9 cm. The forward hand is 3.5 cm wide; the sideways hand is 3 cm wide. The forward arm overlaps the chest. Check foreshortening, near-far size, and overlap.

Answer: Forward arm ratio = 5/9 ≈ 0.56, less than 1, foreshortened correctly. Sideways arm ratio = 9/9 = 1, correct. Forward hand 3.5 cm vs sideways hand 3 cm: forward hand is larger by 0.5 cm, consistent with being nearer. Overlap is present, so depth cue is satisfied.

Reason: Forward-pointing limbs shorten; near hands enlarge; overlap shows near part covering far part.

Check: Measure arm lengths and hand widths; compute ratios; confirm forward hand is larger and overlap is drawn.

Task 4

A creature stands in a setup box with light from the upper left. The far haunch is shaded with parallel lines; the near shoulder is mostly white. The far haunch is 5 cm wide; the near shoulder is 6 cm wide. A cast shadow is drawn under the body. Check shading convention and size change.

Answer: Shading follows the convention: far haunch shaded, near shoulder mostly white. Size change: near shoulder 6 cm vs far haunch 5 cm, so near is larger by 1 cm, consistent with depth. Cast shadow is present. All checks pass.

Reason: The defined convention requires far sections shaded and near sections mostly white; near parts should be slightly larger.

Check: Compare shading of far and near sections against the convention; measure widths and confirm near is larger; confirm cast shadow exists.

Draw Creatures in Perspective: Foreshortened Limbs and Body Depth

Source rubric / reflection

- [ ] Setup box has a horizon line, one VP, and side edges angling toward the VP.
- [ ] At least one limb is drawn along a guide line toward the VP and is shorter than its side-view length.
- [ ] Near hand or foot is larger than the far one and overlaps the body.
- [ ] Shading convention is applied consistently: far sections shaded with parallel lines, near sections mostly white, cast shadow under body.
- [ ] Length ratio for each foreshortened limb is less than 1, checked by measurement.
- [ ] Alternative light directions or limb styles are accepted if labeled and internally consistent.

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