Upside-Down Cow Drawing: Orientation and Rotation Practice

Original tasks 1, 2, 3 / complete keys

Task 1

Draw a frame 8 cm wide and 12 cm tall. Place an inverted cow head in the bottom third. The muzzle must be nearest the bottom edge. Add two ears pointing outward and slightly up, and two eyes above the muzzle. Do not draw the body.

Answer: A frame with a head in the bottom third, muzzle nearest the bottom edge, ears outward and slightly up, and eyes above the muzzle.

Reason: The head is rotated 180 degrees from upright, so the muzzle points down. Placing it in the bottom third keeps the orientation clear.

Check: Verify that the muzzle is closer to the bottom edge than any other head part and that the ears are above the muzzle.

Task 2

Start with an upright cow head sketch on a small square. Rotate the square 90 degrees clockwise three times. Describe where the muzzle points after each turn and after the third turn.

Answer: After one turn the muzzle points right; after two turns it points down; after three turns it points left.

Reason: Each quarter turn rotates the muzzle direction by 90 degrees clockwise. Starting with the muzzle pointing up, one turn gives right, two gives down, three gives left.

Check: Trace the muzzle direction on the square after each turn and confirm the sequence up, right, down, left.

Task 3

In a 10 cm by 14 cm frame, draw an upside-down cow with the back line near the top edge and four legs pointing upward. The head is at the bottom with the muzzle pointing down. Add a short tail pointing downward from the rear. Check that the hooves are nearest the top edge.

Answer: A complete upside-down cow with the back line near the top, legs and hooves pointing up, head at the bottom with muzzle down, and a short tail pointing down.

Reason: The body extends upward from the inverted head, so the hooves naturally point up. The tail points down because the rear is at the bottom of the body in this orientation.

Check: Confirm the hooves are closer to the top edge than the body and that the muzzle is closer to the bottom edge than the ears.

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Original tasks 4 / complete keys

Task 4

A drawing shows a cow with the muzzle pointing up and the hooves pointing down. State whether it is upside down according to this lesson's convention, and describe one change to make it correct.

Answer: It is not upside down. Change the head so the muzzle points down and move the hooves to point upward near the top edge.

Reason: The convention requires the muzzle nearest the bottom edge and the hooves nearest the top edge. The described drawing has the opposite orientation.

Check: Compare the muzzle and hoof positions to the top and bottom edges; both must match the convention.

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Source rubric / reflection

- [ ] Frame is drawn and labeled with a top back line and a bottom head zone.
- [ ] Inverted head is in the bottom third with the muzzle nearest the bottom edge.
- [ ] Ears point outward and slightly up from the head.
- [ ] Eyes are above the muzzle and within the head shape.
- [ ] Body extends upward from the head with the back line near the top edge.
- [ ] Four legs point upward with hooves near the top edge.
- [ ] Orientation check is completed and any mismatches are corrected.
- [ ] Valid alternatives are accepted if the muzzle, hooves, and back line meet the orientation check, regardless of letter style or exact proportions.

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