Draw an Upside-Down Turtle: Shell and Limb Orientation

Original tasks 1, 2, 3 / complete keys

Task 1

On a blank page, draw an upside-down turtle with a shell width of about 8 cm and four limbs. Use the convention from the lesson. Describe your drawing in words and state whether each limb tip is below the plastron edge.

Answer: A drawing with a wide oval shell, a dome curve below it, a plastron edge above, and four tapered limbs angling outward. All four limb tips are below the plastron edge.

Reason: The dome is placed below the shell outline and the plastron edge above it, so the orientation is inverted. Limbs angle outward and upward but their tips remain below the plastron line.

Check: Trace the dome to confirm it is lowest; trace the plastron edge to confirm it is above the shell; check each limb tip against the plastron line.

Task 2

Draw an upside-down turtle where the shell is a rounded rectangle instead of an oval. Keep the dome below and the plastron edge above. Add two curved shell detail lines that bow downward. State one way your drawing differs from the worked example.

Answer: A rounded-rectangle shell with a dome curve below, a plastron edge above, four outward limbs, and two downward-bowing detail lines. It differs from the worked example in shell shape.

Reason: Changing the shell shape is a valid alternative as long as the dome remains the lowest curve and the plastron edge stays above the shell. Detail lines must bow downward to match the dome.

Check: Confirm the dome is lowest, the plastron edge is above the shell, and both detail lines bow downward.

Task 3

Draw an upside-down turtle with one deliberate mistake: make one limb point straight down. Then correct that limb so it angles outward and its tip is below the plastron edge. Describe the before and after.

Answer: Before: one limb points straight down, breaking the outward-splay convention. After: that limb is redrawn angling outward and upward, with its tip below the plastron edge.

Reason: A downward limb reads as a normal turtle limb. Redrawing it outward restores the inverted orientation. The correction is local, so the rest of the drawing stays unchanged.

Check: Point to the corrected limb tip and confirm it is outward and below the plastron edge; recheck the other three limbs.

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Original tasks 4 / complete keys

Task 4

Draw an upside-down turtle with a head and tail. Use a shell width of about 12 cm and limb length of about 4 cm as hypothetical examples. Then run all three orientation checks and list any correction you made.

Answer: A drawing with a 12 cm shell, 4 cm limbs, head and tail pointing away from the dome, and all three checks passing. If a limb tip crossed the plastron edge, it was shortened or lowered.

Reason: The head and tail must point away from the dome to avoid reversing the convention. The three checks confirm dome position, plastron position, and limb orientation. Any correction should be local and rechecked.

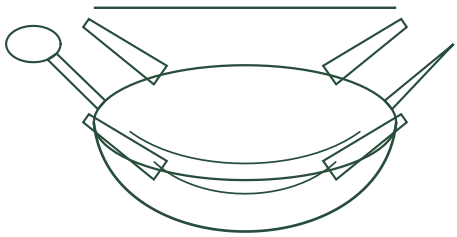
Check: Trace the dome, trace the plastron edge, and point to each limb tip; confirm head and tail point away from the dome.

Draw an Upside-Down Turtle: Shell and Limb Orientation

Task 1 / answers

Inverted turtle / a selected schematic pose, not a gravity or anatomical rule / printed 1:2

Shell width 8 cm / limb length 2.4 cm chosen (not given)



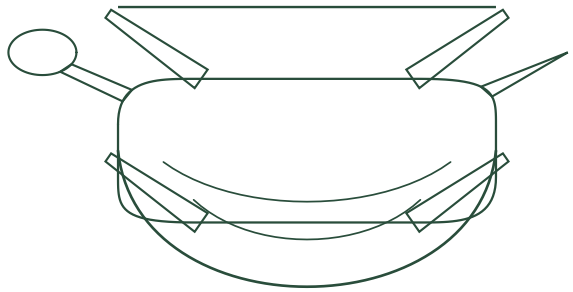
Upper separate edge = plastron; lowest major curve = dome. Exactly four tapered limbs attach on the rim and splay outward/upward, with every tip below the plastron edge. Head and tail are opposite and away from the lower dome. Two shell details bow downward.

Draw an Upside-Down Turtle: Shell and Limb Orientation

Task 2 / answers

Inverted turtle / a selected schematic pose, not a gravity or anatomical rule / printed 1:2

Shell width 10 cm / limb length 3 cm chosen (not given)



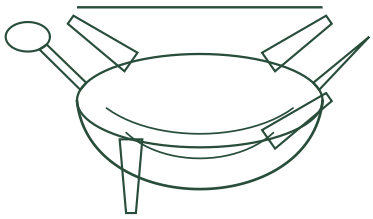
Upper separate edge = plastron; lowest major curve = dome. Exactly four tapered limbs attach on the rim and splay outward/upward, with every tip below the plastron edge. Head and tail are opposite and away from the lower dome. Two shell details bow downward. The rounded rectangle is an allowed shell alternative.

Draw an Upside-Down Turtle: Shell and Limb Orientation

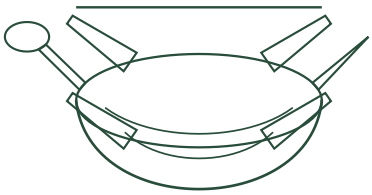
Task 3 / answers

Inverted turtle / a selected schematic pose, not a gravity or anatomical rule / printed 1:2

GIVEN / one downward limb



AFTER / local limb correction



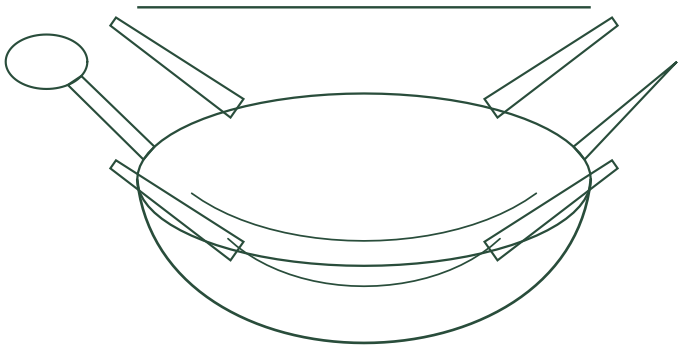
The given intentionally violates the selected splay convention; the corrected limb angles outward/upward. All four tips remain on the shell side of the upper plastron line. Other selected geometry stays unchanged.

Draw an Upside-Down Turtle: Shell and Limb Orientation

Task 4 / answers

Inverted turtle / a selected schematic pose, not a gravity or anatomical rule / printed 1:2

Shell width 12 cm / limb length 4 cm given hypothetical



Upper separate edge = plastron; lowest major curve = dome. Exactly four tapered limbs attach on the rim and splay outward/upward, with every tip below the plastron edge. Head and tail are opposite and away from the lower dome. Two shell details bow downward.

Draw an Upside-Down Turtle: Shell and Limb Orientation

Source rubric / reflection

- [ ] Dome is the lowest major curve in the drawing.
- [ ] Plastron edge is clearly above the shell outline.
- [ ] Four limbs are present and attach to the shell rim.
- [ ] Each limb angles outward and slightly upward, with tip below the plastron edge.
- [ ] Head and tail point away from the dome.
- [ ] Shell detail lines bow downward, matching the dome.
- [ ] Drawing is readable as an inverted turtle without labels.
- [ ] Valid style alternatives are accepted if orientation checks pass.

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