Part Drawings for Practice: Completing Missing Parts of Objects

Original tasks 1, 2 / complete keys

Task 1

A partial outline shows the left half of a symmetric mug: a vertical left edge 5 cm tall, a curved bottom meeting a base line, and a rim line at the top. The visible half is 3 cm wide. Complete the mug by drawing the missing right half and a handle on the right. Describe your completed drawing in words.

Answer: The completed mug is about 6 cm wide and 5 cm tall, with the right half mirroring the left. The handle attaches near mid-height on the right and curves outward, returning below the rim. Join points are marked at the rim and base.

Reason: Symmetry gives the missing width as twice the visible half. The handle must attach at plausible points and not cross the outline. Scale is checked by comparing the completed width to the given 3 cm half.

Check: Measure the completed width; it should be about 6 cm. Trace the outline to confirm no gaps at the rim or base. Confirm the handle attaches at two points on the right side.

Task 2

A partial outline shows a car body 12 cm long with two wheel arches: the front arch is 3 cm from the front and the rear arch is 3 cm from the rear. The wheels are missing. Complete the car by drawing two wheels centered under the arches, touching a ground line. Describe your drawing.

Answer: Two wheels of equal diameter are centered under each arch, touching the same ground line. Each wheel sits within its arch and the car body remains 12 cm long.

Reason: The arches imply wheel positions. Equal spacing from front and rear gives balance. The ground line ensures both wheels touch consistently.

Check: Measure the distance from each wheel center to the nearest end; both should be about 3 cm. Confirm both wheels touch the ground line and fit within the arches.

Part Drawings for Practice: Completing Missing Parts of Objects

Original tasks 3, 4 / complete keys

Task 3

A partial outline shows the left half of a symmetric leaf shape: a curved left edge 6 cm tall and a central vein line. The visible half is 2 cm wide. Complete the leaf by drawing the missing right half. Describe your drawing.

Answer: The completed leaf is about 4 cm wide and 6 cm tall, with the right half mirroring the left curve and meeting the central vein at the top and bottom.

Reason: Symmetry determines the missing width. The central vein is a join line that must be met at both ends.

Check: Measure the completed width; it should be about 4 cm. Check that the right edge meets the vein at top and bottom without gaps.

Task 4

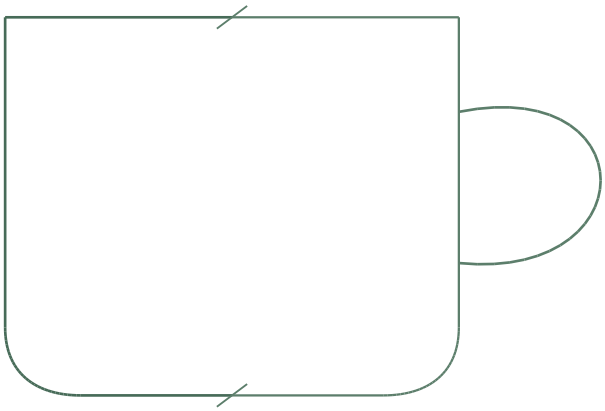
A partial outline shows a rectangular sign 8 cm wide and 5 cm tall with the top and left edges drawn, and a baseline for lettering at the bottom. The right and bottom edges are missing, and the word 'STOP' is partially shown with only 'ST' visible on the left. Complete the sign by drawing the missing edges and the remaining letters, keeping x-height from baseline to midline consistent with the given letters. Describe your drawing.

Answer: The completed sign is 8 cm wide and 5 cm tall with all four edges closed. The letters 'OP' are added to the right of 'ST', keeping the same baseline and midline as the given letters. Letter style may vary but x-height remains consistent.

Reason: The missing edges are inferred from the given top and left edges and the stated dimensions. The lettering follows the x-height convention: baseline to midline. Styles vary, so any consistent style is valid.

Check: Measure the completed width and height; they should be about 8 cm and 5 cm. Check that all letters share the same baseline and midline. Confirm the outline closes at all four corners.

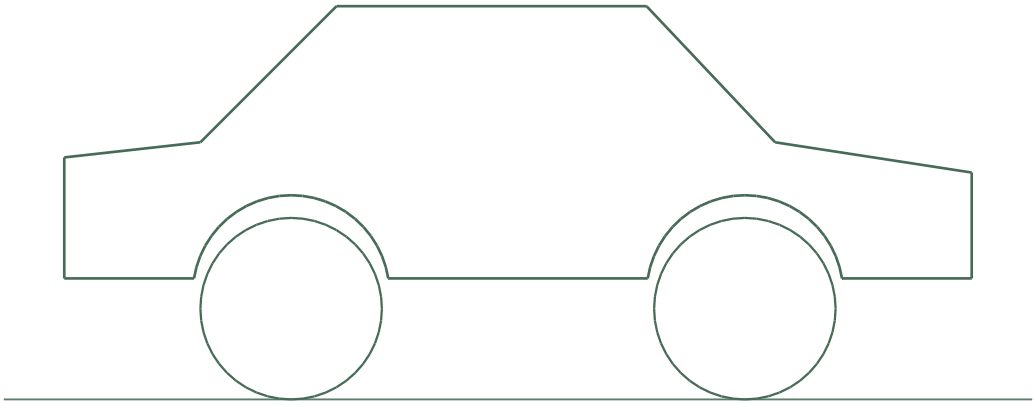
Complete only the missing object part / all labelled object lengths print at 1:1



Complete body: 6 cm wide x 5 cm tall. Handle outside the body.

Keep the supplied half, meet it at the rim and base, and attach the handle at two right-side positions. The curve and handle shape are a chosen drawing example.

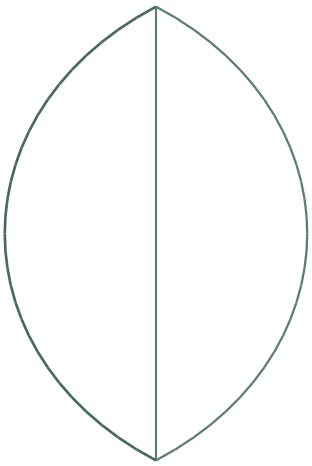
Complete only the missing object part / all labelled object lengths print at 1:1



Given body length 12 cm / arch centers 3 cm from the nearest end.

Chosen equal wheel radii: 1.2 cm. Both centers are 1.2 cm above the same ground line; both wheels fit under their arches.

Complete only the missing object part / all labelled object lengths print at 1:1



Completed leaf: 4 cm wide x 6 cm tall; both edges meet the vein at top and bottom.

Complete only the missing object part / all labelled object lengths print at 1:1



Closed 8 x 5 cm sign / added OP uses the same chosen 14 mm lettering band.

This selected plain uppercase style is drawn from fixed strokes. Baseline-to-midline height follows the supplied letters; letter style may vary.

Part Drawings for Practice: Completing Missing Parts of Objects

Source rubric / reflection

- [ ] Closure: 0 = gaps or overlaps at joins; 1 = minor misalignment; 2 = all joins meet cleanly.
- [ ] Scale: 0 = missing part clearly different scale; 1 = close but inconsistent; 2 = consistent with given part.
- [ ] Feature logic: 0 = added features contradict outline; 1 = plausible but awkward; 2 = features fit constraints and style.
- [ ] Convention use: 0 = no tick marks or inconsistent line use; 1 = partial; 2 = tick marks and solid outline used consistently.

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