

Logic 6 — Workshop: what is a paradox

Logic · Lesson 6 · Workshop sheet

One lesson, worked alone, about 45 minutes. Tick each step. You need this sheet, your Lesson 6 handout, and the four codes below.

Step	min
☐ 1 · Key terms. Terms quiz (code 3), one round: definition → term. Under 10 of 14? Read the handout's key terms once, then a second round.	5
☐ 2 · Recall Lesson 5. Exercise 1 on the workshop page (code 1), from memory, before scrolling on.	3
☐ 3 · Stage 1 — the case first. Read the <i>Vasa</i> case, do Exercise 2, then write your side in your notebook: two or three sentences, discovered or drawn, and one reason. Stage 3 needs this.	7
☐ 4 · Stage 2, Part A — what a paradox is. Exercises 3–4. Scroll the tables away before each.	8
☐ 5 · Part B — one of three must go. Exercises 5–7. Exercise 6 stops on purpose after epistemicism; Exercise 7 walks the two horns.	10
☐ 6 · Part C — spot the error. Exercises 8–9. Exercise 9's key says <i>cannot say yet</i> ; that is the point.	6
☐ 7 · Stage 3 — your advice, with the tools. Exercise 10 from memory; rewrite your Stage 1 paragraph in three sentences; run the self-check.	4
☐ 8 · Compare. Only now open the model paragraphs (code 2) and mark your paragraph 1–4 against the checklist.	2

New in this lesson

- ▶ A paradox has three pieces: acceptable-looking premises, a valid-looking step, an unacceptable conclusion. One of the three must go. It is not a contradiction — a contradiction is simply wrong.
- ▶ The standard resolutions (Cauchy, Tarski, Zermelo-Fraenkel) each reject a *premise*, never the step — and each pays a price.
- ▶ The Sorites has no standard resolution: four responses, four ways of handling the boundary.
- ▶ The trap: writing “we cannot know where the boundary is” as if it meant “there is no boundary”.

If you get stuck

- ▶ Exercises 3–4: does the sentence *argue* to something absurd (paradox), *assert* both P and not-P (contradiction), or just surprise you? Then: which line is the “therefore”?
- ▶ Exercise 5: ask what the resolver *refused to let you say*. That is the premise that went.
- ▶ Exercise 7: on each horn, ask only “does R meet the condition for being in R?” — then answer the next row from that.
- ▶ Stage 3: a reason that names the 98% figure names an outcome. Say instead where the indeterminacy lives.
- ▶ Anything else: ask me.



1 · Workshop page



2 · Model paragraphs



3 · Key terms quiz



4 · This sheet

All at salvemec.ch/toktok/core/ · On the back: which exercise went wrong at the first try. Next lesson starts there.