ANSWER KEY — FREE SAMPLE

Student Workbook Answer Key

Companion to the Student Workbook — For the Love of Truth, Volume 1: Fundamentals

This sample includes the full introduction to the answer key, plus the complete Lab 1 and Lab 18 worked answers. Read the full text online, or purchase print and electronic editions, at philalethiclogic.com.

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About This Answer Key

This answer key provides worked solutions for every lab in the Student Workbook—one section per lab, following the same numbering and section headings as the workbook itself. It is a standalone companion volume: it does not alter the Student Workbook, the Teacher/Parent Supplement, or the main text in any way, and none of those texts require this volume to be used as intended.

Symbolic answers follow the notation and conventions built up across the main text (discrete, universal, indeterminate, and portional claims; predicate and whole-claim negation; the decomposition and validation process; modality; and the compound and bracketed-notation systems). For open-ended, discussion, or reflection items with no single correct answer, this key gives guidance rather than a fixed response, consistent with how the Teacher/Parent Supplement treats the same kind of item in the main text.

Lab 1 is discussion-based by the Student Workbook's own design and carries no answer key there; this volume still covers its objectively answerable exercises, following the same approach the Teacher/Parent Supplement takes with the main text's own opening chapter.

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Lab 1 Answer Key: Introduction to Philalethic Logic

Answers for the extra-practice lab covering Chapter 1.

Lab 1's own instructions note that it has no fixed answer key, since Chapter 1 lays philosophical groundwork rather than introducing formal symbolization. The items below that do have a determinate right answer (Belief, Doubt, or Denial; Apply the Axioms; True, False, or Not Yet Verifiable) are covered here anyway, following the same approach the Teacher/Parent Supplement takes with the main text's own Chapter 1 exercises. The Discussion Questions remain open-ended by design.

Belief, Doubt, or Denial?

1. Withholding judgment — a clean, explicit case of doubt.
2. Withholding judgment about whether he left. The witness is correcting a mix-up between denying one claim (arrival) and having any settled opinion at all about a different claim (leaving) — worth flagging as the kind of precision this chapter is building toward.
3. Withholding judgment on the bridge's safety. Note that withholding judgment doesn't stop someone from acting cautiously in the meantime — doubt can still motivate a prudent choice.
4. Leaning toward judging false (doubt short of full denial), while still hedging practically by packing the umbrella.
5. Withholding judgment, stated directly ("I haven't decided yet").

Apply the Axioms

1. Violates non-contradiction: the same fact (being delivered) can't both belong and not belong to the package at once and in the same respect.
2. Violates excluded middle, if this is meant as a genuinely assertoric claim: a sufficiently clear claim must be either true or false, and refusing both isn't a legitimate third option — it's an evasion. (Worth discussing: some "questions" aren't actually assertoric claims at all, in which case excluded middle was never in play to begin with.)
3. Misapplies identity: this treats an incidental, changeable property (wearing glasses) as though it settled who someone is. Identity only requires that a thing be itself — a disguise doesn't create a second thing.
4. Misapplies identity/truth to what is really just a difference in taste. "Best" here functions as a preference claim, not a strictly assertoric one; if it is meant as an objective claim, its truth can't actually vary from person to person for the same underlying fact.
5. Violates non-contradiction: the light's color at that moment can't both be and not be red — at least one testimony must be inaccurate (or the two statements concern different moments, which would dissolve the contradiction rather than confirm it).

True, False, or Not Yet Verifiable?

1. True or false already, right now, even though nobody has verified it — a claim's truth doesn't wait on being confirmed.
2. True or false already, and entirely knowable in principle — just not yet stated to the reader.
3. True or false already under this chapter's realist view of truth, though it's a good discussion piece: does a claim about a genuinely open future event already have a settled truth value, or does it only become true or false once the day arrives? Either way it is not yet practically verifiable.
4. True, and immediately verifiable.
5. Almost certainly true given how many people are alive, but a good example of a claim that's true or false right now while being practically unverifiable by any one reader.
6. True or false already — pi's digits are fixed, not random — even though verifying it requires computation most readers won't do.

7. True or false already, though practically unverifiable to you specifically.
8. Not yet verifiable — and arguably not yet determined at all. Unlike the other items here, this concerns a genuinely open future event; a useful contrast with item 3 (physical/logical indeterminacy vs. merely unknown-to-us).
9. True or false already — a factual, checkable claim about existing languages, just not yet verified by the reader.

Discussion Questions

No fixed answer — these are intentionally open-ended. Use them as talking points against the chapter's own treatment of truth, belief, knowledge, and the belief/knowledge/understanding/wisdom ladder, rather than as a rubric with a single right response, consistent with how the Teacher/Parent Supplement treats this chapter's own discussion questions.

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Lab 18 Answer Key: Special Problems, Common Mistakes, and Informal Fallacies

Answers for the extra-practice lab covering Chapter 18.

Name the Fallacy

1. “I don’t need to walk you through the numbers — every economist worth listening to already agrees with my forecast.” → Appeal to Authority, with a “no true Scotsman” flavor baked in — “worth listening to” quietly excludes any dissenting economist from counting at all.
2. “Councilwoman, you want to add a bike lane? So you want to ban cars from downtown entirely?” → Straw Man.
3. “If we let one student turn in a late assignment, pretty soon nobody will ever meet a deadline again and the whole system falls apart.” → Slippery Slope.
4. “This cream must work — my coworker used it for a week and her skin cleared right up.” → Hasty Generalization — a single anecdote treated as sufficient evidence, with an unaddressed correlation/causation gap besides.
5. “Don’t listen to his critique of the budget — he got fired from his last accounting job.” → Ad Hominem.
6. “You’re either fully on board with the merger, or you’re actively trying to sink the company.” → False Dilemma.
7. “This restaurant has to be the best in town — my whole book club raves about it every time we meet there.” → Hasty Generalization — a small, self-selected sample of friends with similar tastes who chose to keep meeting there.
8. “Before we discuss the delayed shipment, let’s talk about how much revenue this product line brings in.” → Red Herring.

More Fallacies in the Wild

1. “My financial advisor recommended this fund, and he’s been doing this for twenty years, so it has to be a safe bet.” → Appeal to Authority — years of general experience doesn’t establish that this specific fund is safe, and a financial advisor recommending a fund he sells also raises an unaddressed conflict-of-interest question.
2. “If we let staff work from home one day a week, next thing you know nobody will ever come into the office again.” → Slippery Slope.
3. “You’re questioning the new curriculum? Typical — you probably think kids shouldn’t learn anything challenging at all.” → Straw Man.
4. “This training program works — anyone who truly commits to it gets promoted, and if you didn’t get promoted, you obviously didn’t truly commit.” → Circular Reasoning (Begging the Question) — the claim is unfalsifiable, since any failure to get promoted is simply redefined as insufficient commitment rather than counted as evidence against the program.
5. “Two neighbors on my street had their packages stolen last week. Package theft is clearly out of control around here.” → Hasty Generalization.

When Is It Even a Claim?

No fixed answer for either item — the awkwardness of “Sears is a great place to buy appliances” in the present tense comes from asserting a claim about something whose relevant state has substantially changed (the same pattern as the chapter’s own dodo-bird and Blockbuster examples); rephrasing in the past tense resolves the discomfort by correctly locating the claim in the period it was actually true. For the second item, check that the student’s own example shows the same tense-mismatch discomfort and that the past-tense restatement resolves it.

How Do You Actually Know That?

1. “I read the first three pages and the writing was clunky, so the whole book is bad.” → Hasty Generalization — three pages is a small, unrepresentative sample of an entire book.
2. “My grandfather smoked a pack a day and lived to 95, so the health warnings must be overblown.” → Hasty Generalization — one long-lived exception doesn’t outweigh population-level statistical evidence, and there’s no way to know how many others didn’t survive the same habit.
3. “The last two times I called customer service, I got a rude rep — that company clearly doesn’t care about its customers.” → Hasty Generalization — two calls is a small sample to generalize an entire company’s culture from, though it’s reasonable personal evidence to be cautious going forward.
4. “Every time I’ve worn my lucky socks, my team has won. I’m wearing them Sunday.” → A superstition dressed up as an inductive pattern — no causal mechanism connects socks to outcomes, and this is likely a case of noticing confirming instances (wins) while not tracking the times the socks were worn and the team still lost.
