

Glider Instructor Practice Test (Sample)

Study Guide



Everything you need from our exam experts!

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Table of Contents

Copyright 1

Table of Contents 2

Introduction 3

How to Use This Guide 4

Questions 5

Answers 8

Explanations 10

Next Steps 15

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Introduction

Preparing for a certification exam can feel overwhelming, but with the right tools, it becomes an opportunity to build confidence, sharpen your skills, and move one step closer to your goals. At Examzify, we believe that effective exam preparation isn't just about memorization, it's about understanding the material, identifying knowledge gaps, and building the test-taking strategies that lead to success.

This guide was designed to help you do exactly that.

Whether you're preparing for a licensing exam, professional certification, or entry-level qualification, this book offers structured practice to reinforce key concepts. You'll find a wide range of multiple-choice questions, each followed by clear explanations to help you understand not just the right answer, but why it's correct.

The content in this guide is based on real-world exam objectives and aligned with the types of questions and topics commonly found on official tests. It's ideal for learners who want to:

- Practice answering questions under realistic conditions,
- Improve accuracy and speed,
- Review explanations to strengthen weak areas, and
- Approach the exam with greater confidence.

We recommend using this book not as a stand-alone study tool, but alongside other resources like flashcards, textbooks, or hands-on training. For best results, we recommend working through each question, reflecting on the explanation provided, and revisiting the topics that challenge you most.

Remember: successful test preparation isn't about getting every question right the first time, it's about learning from your mistakes and improving over time. Stay focused, trust the process, and know that every page you turn brings you closer to success.

Let's begin.

How to Use This Guide

This guide is designed to help you study more effectively and approach your exam with confidence. Whether you're reviewing for the first time or doing a final refresh, here's how to get the most out of your Examzify study guide:

1. Start with a Diagnostic Review

Skim through the questions to get a sense of what you know and what you need to focus on. Your goal is to identify knowledge gaps early.

2. Study in Short, Focused Sessions

Break your study time into manageable blocks (e.g. 30 - 45 minutes). Review a handful of questions, reflect on the explanations.

3. Learn from the Explanations

After answering a question, always read the explanation, even if you got it right. It reinforces key points, corrects misunderstandings, and teaches subtle distinctions between similar answers.

4. Track Your Progress

Use bookmarks or notes (if reading digitally) to mark difficult questions. Revisit these regularly and track improvements over time.

5. Simulate the Real Exam

Once you're comfortable, try taking a full set of questions without pausing. Set a timer and simulate test-day conditions to build confidence and time management skills.

6. Repeat and Review

Don't just study once, repetition builds retention. Re-attempt questions after a few days and revisit explanations to reinforce learning. Pair this guide with other Examzify tools like flashcards, and digital practice tests to strengthen your preparation across formats.

There's no single right way to study, but consistent, thoughtful effort always wins. Use this guide flexibly, adapt the tips above to fit your pace and learning style. You've got this!

Questions

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- 1. Which scenario requires at least a 12-hour delay before flying to a cabin altitude of 8000 feet or less?**
 - A. Diving with a controlled ascent**
 - B. Diving without controlled ascent**
 - C. No diving before flight**
 - D. Diving deeper than 60 feet**

- 2. What is the suggested speed to fly when passing through lift with no intent to work the lift?**
 - A. Best glide speed**
 - B. Stall speed**
 - C. Minimum sink speed**
 - D. Cruise speed**

- 3. For a Commercial Certificate with a glider rating, which combination of hours and flights is required?**
 - A. 20 hours; 80 flights**
 - B. 30 hours; 120 flights**
 - C. 25 hours; 100 flights**
 - D. 15 hours; 60 flights**

- 4. Which of the following represents the minimum wait time after a scuba dive without a controlled ascent before flying to 8000 ft cabin altitude?**
 - A. 12 hours**
 - B. 2 hours**
 - C. 18 hours**
 - D. 30 hours**

- 5. A glider's best glide speed corresponds to an L/D ratio of what?**
 - A. 10 to 1**
 - B. 15 to 1**
 - C. 20 to 1**
 - D. 25 to 1**

- 6. Flight through a restricted area should not be accomplished unless the pilot has**
- A. contacted ATC**
 - B. a weather briefing**
 - C. filed a flight plan**
 - D. received prior authorization from the controlling agency**
- 7. Which statement about glide distance is correct when using best glide speed?**
- A. Maximize distance traveled for a given altitude**
 - B. Maximize rate of climb**
 - C. Maximize bank angle**
 - D. Maximize fuel efficiency**
- 8. The resistance, or skin friction, due to the viscosity of the air as it passes along the surface of a wing is called**
- A. Profile drag**
 - B. Induced drag**
 - C. Form drag**
 - D. Parasite drag**
- 9. A person whose Flight Instructor Certificate has been suspended may not**
- A. apply for any rating to be added to that certificate during the period of suspension**
 - B. teach flight students during suspension**
 - C. renew the certificate during suspension**
 - D. cancel the suspension**
- 10. Moving the center of gravity from the aft limit toward beyond the forward limit will cause the stalling speed to change in which way?**
- A. Decrease**
 - B. No change**
 - C. Significant decrease**
 - D. Increase**

Answers

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1. B
2. C
3. C
4. A
5. C
6. D
7. A
8. A
9. A
10. D

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Explanations

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1. Which scenario requires at least a 12-hour delay before flying to a cabin altitude of 8000 feet or less?

- A. Diving with a controlled ascent**
- B. Diving without controlled ascent**
- C. No diving before flight**
- D. Diving deeper than 60 feet**

When you dive, your body absorbs nitrogen from the breathing mix under pressure. Flying later exposes you to lower cabin pressure, which can cause dissolved nitrogen to come out of solution and form bubbles in tissues—decompression sickness. A controlled ascent during the dive helps off-gas nitrogen more gradually, reducing the amount that remains dissolved. If you dive without a controlled ascent, more nitrogen stays in solution and the risk of bubbles forming is higher when you later fly, so a delay of at least 12 hours before flying to a cabin altitude of 8000 feet or less is recommended. If you didn't dive at all, or if you completed a controlled ascent, the need for such a delay isn't the same. Deeper dives generally carry greater risk, but the specific scenario that requires the 12-hour wait in this context is diving without a controlled ascent.

2. What is the suggested speed to fly when passing through lift with no intent to work the lift?

- A. Best glide speed**
- B. Stall speed**
- C. Minimum sink speed**
- D. Cruise speed**

When you're passing through lift without trying to work it, your aim is to minimize your own descent so you can stay in the updraft longer. The minimum sink speed is the airspeed that produces the smallest descent rate for your glider in calm air. At this speed, your sink is minimized, so you remain in the lift longer as you cross through it. Flying faster would increase your sink and cause you to exit the lift sooner, while flying slower toward stall or much faster for "best glide" or cruise would either reduce control margins or waste the opportunity to stay in the lift. So, the best choice is the minimum sink speed.

3. For a Commercial Certificate with a glider rating, which combination of hours and flights is required?

- A. 20 hours; 80 flights**
- B. 30 hours; 120 flights**
- C. 25 hours; 100 flights**
- D. 15 hours; 60 flights**

The requirement tests how much real-world practicing you've done in a glider, balancing both time aloft and the number of flights. For a glider commercial rating, you need enough total flight time to show you can handle the airplane's endurance, energy management, and control under different conditions, and you also need a high enough flight count to prove you've repeatedly trained the essential skills—launch methods, pattern work, and landings—through many separate flights. Twenty-five hours of flight time paired with one hundred flights provides that mix: enough total time to develop consistent control and decision-making, plus a large number of launches and landings to demonstrate repeated, reliable performance. The other options either don't give enough flight activity to prove proficiency or require more time without the same emphasis on repeated practice that gliding operations demand.

4. Which of the following represents the minimum wait time after a scuba dive without a controlled ascent before flying to 8000 ft cabin altitude?

- A. 12 hours**
- B. 2 hours**
- C. 18 hours**
- D. 30 hours**

After a dive, nitrogen absorbed in body tissues must off-gas safely. Flying to a cabin altitude of about 8,000 ft lowers the ambient pressure, which can cause dissolved nitrogen to form bubbles if off-gassing isn't complete. For a simple scuba dive with no decompression stops (no controlled ascent), the body has typically off-gassed enough within 12 hours to reduce the risk of decompression sickness when you fly. That's why the minimum wait time is 12 hours. If the dive involved deeper depths, multiple dives, or required decompression stops, the waiting period would be longer (often around 24 hours) before flying.

5. A glider's best glide speed corresponds to an L/D ratio of what?

- A. 10 to 1**
- B. 15 to 1**
- C. 20 to 1**
- D. 25 to 1**

Best glide speed is the airspeed at which the lift-to-drag ratio is maximized, so the glider can travel the farthest horizontally for a given loss of altitude. The lift-to-drag ratio, L/D, directly determines the glide distance: the higher the ratio, the flatter the glide and the more distance covered per unit of altitude lost. At the speed where L/D is at its maximum, you get the smallest possible descent angle and the greatest glide distance. In this context, the maximum L/D is about 20 to 1, meaning for every unit of altitude you lose, you can move about twenty units horizontally. The resulting glide angle is roughly $\arctan(1/20)$, about 3 degrees, a very shallow descent. If you go faster, drag due to skin and form increases (lowering L/D); if you go slower, induced drag from the wing's lift increases (also lowering L/D). So the best glide speed corresponds to an L/D ratio around 20 to 1.

6. Flight through a restricted area should not be accomplished unless the pilot has

- A. contacted ATC**
- B. a weather briefing**
- C. filed a flight plan**
- D. received prior authorization from the controlling agency**

Entering a restricted area requires explicit permission from the agency that controls that airspace. These areas are set aside for safety and security, and access isn't allowed without prior authorization. Weather briefing or filing a flight plan doesn't grant entry, and while ATC coordination can be part of the process, the essential requirement is authorization from the controlling agency to enter. If authorization can't be obtained, you must reroute to avoid the restricted airspace.

7. Which statement about glide distance is correct when using best glide speed?

- A. Maximize distance traveled for a given altitude**
- B. Maximize rate of climb**
- C. Maximize bank angle**
- D. Maximize fuel efficiency**

Best glide speed is the airspeed that gives the maximum lift-to-drag ratio, so the glider can travel the farthest horizontally for a given loss of altitude. At this speed the glide distance is maximized because the aircraft converts altitude into forward travel most efficiently. Flying faster increases drag more than it increases lift, reducing distance, while flying slower increases induced drag and also reduces distance. The other ideas don't describe what best glide speed achieves: it isn't about climbing, it isn't about maximizing bank angle, and fuel efficiency isn't a factor in unpowered flight.

8. The resistance, or skin friction, due to the viscosity of the air as it passes along the surface of a wing is called

- A. Profile drag**
- B. Induced drag**
- C. Form drag**
- D. Parasite drag**

The resistance produced by the air's viscosity as it flows along the wing surface is skin-friction drag. This viscous shear acts along the surface and is a primary component of the drag you get from the wing's interaction with the air. In drag classifications, the surface-related portion is grouped into profile drag, which is the total drag due to the wing's shape and its surface, combining friction drag and the pressure-based form drag. Form drag comes from pressure differences around the wing, not from viscosity, and induced drag is tied to lift generation, not surface shear. Parasite drag covers all non-lift-producing drag, including both skin friction and form drag, but the specific surface friction described here is best described as profile drag.

9. A person whose Flight Instructor Certificate has been suspended may not

- A. apply for any rating to be added to that certificate during the period of suspension**
- B. teach flight students during suspension**
- C. renew the certificate during suspension**
- D. cancel the suspension**

When a Flight Instructor Certificate is suspended, all privileges tied to that certificate are temporarily removed, so the holder cannot act as an instructor or take actions that would expand or change the certificate while the suspension is in effect. Adding a rating to the certificate would extend what the certificate allows you to do, which is precisely something you cannot initiate during a suspension. Reinstatement or renewal typically comes after the suspension ends, and the suspension itself is not something you can cancel on your own. So the limitation that fits the situation best is that you may not apply for any rating to be added to the certificate during the suspension period.

10. Moving the center of gravity from the aft limit toward beyond the forward limit will cause the stalling speed to change in which way?

- A. Decrease**
- B. No change**
- C. Significant decrease**
- D. Increase**

Moving the CG forward increases longitudinal stability, which requires more tail-down force to balance the aircraft's nose-down tendency. That tail-down force subtracts from the lift the wing otherwise provides to support the weight, so the wing must generate additional lift to keep level flight. Achieving that extra lift means operating at a higher angle of attack, and since stall occurs at the wing's maximum lift coefficient, the speed at which that maximum is reached is higher. So, shifting the CG toward the forward limit raises the stalling speed.

Next Steps

Congratulations on reaching the final section of this guide. You've taken a meaningful step toward passing your certification exam and advancing your career.

As you continue preparing, remember that consistent practice, review, and self-reflection are key to success. Make time to revisit difficult topics, simulate exam conditions, and track your progress along the way.

If you need help, have suggestions, or want to share feedback, we'd love to hear from you. Reach out to our team at hello@examzify.com.

Or visit your dedicated course page for more study tools and resources:

<https://gliderinstructor.examzify.com>

We wish you the very best on your exam journey. You've got this!

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