

# Student Pilot Presolo Written Exam

The Federal Aviation Regulations (FAR) is quite clear in specifying the requirement for a presolo written exam. FAR 61.87(b)(1) & (2) spells out the requirements for the test, stating that the test must include questions about the airspace near where you will be flying, questions about FAR parts 61 and 91, and specific airplane questions regarding the airplane you will be using for your solo.

I have broken the test into those three categories, labeled General Knowledge, Piper Cherokee 140, and Airport and Airspace. With that in mind, here is your test.

## General Knowledge:

1. What personal documents and endorsements must you have prior to your first solo?

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2. What limitations are placed on a student pilot with regard to carrying passengers or cargo for hire?

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3. As a student pilot, are you allowed to fly above the clouds? \_\_\_\_\_

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4. What are the in-flight visibility limitations for a student pilot?

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5. Who has the final authority and responsibility for the aircraft when you are flying solo?

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6. List the preflight items required by the FARs with regard to airports and aircraft performance.

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7. During engine run up, you cause rocks, debris, and propeller blast to be directed another aircraft or person. Could this be considered reckless operations of an aircraft per FAR 91.13?

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8. You may not act as Pilot In Command (PIC) of a civil aircraft within \_\_\_\_\_ hours after consumption of any alcoholic beverage, or while you have \_\_\_\_ % by weight or more alcohol in your blood.

9. What are the general requirements pertaining to the use of safety belts and shoulder harness?

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10. What is the minimum fuel reserve for day VFR flight and on what cruise speed is the fuel reserve based?

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11. A transponder with Mode C is required at all times in all airspace at and above \_\_\_\_\_ feet MSL, excluding that airspace at and below \_\_\_\_\_ feet AGL.

12. What aircraft documents be aboard the aircraft any time it is in flight?

A \_\_\_\_\_

R \_\_\_\_\_

O \_\_\_\_\_

W \_\_\_\_\_

13. No person may operate an aircraft so close to another as to create a(n)

\_\_\_\_\_.

14. Who has the right of way when two aircraft are on final approach to land at the same time?

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15. Discuss FAR 91.113(b),(c),(d),(e) and (f)

B -

c -

d -

e -

f -

16. Except for takeoff and landing, what are the minimum safe altitudes when flying over congested areas?

Other areas?.

17. If an altimeter setting is not available at the airport you are departing from, what setting would you use before departing on a local flight?

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18. What altitude should you use when operating under VFR in level cruising flight at more than 3000 feet AGL?

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19. When practicing steep turns, maneuvering during slow flight, or practicing stalls, the entry altitude must allow a recovery to be completed no lower than \_\_\_ feet AGL.

20. When is a go-around appropriate?

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21. What steps should you follow after an engine failure in flight?

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**Piper Cherokee 140 – N1854T Use POH:**

1. The airplane has a lot of equipment installed. Flight instruments, engine instruments, avionics, of all this stuff, what is the minimum equipment and instruments required for a VFR day flight.

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2. Fill in the “V-Speed” definitions and the corresponding speed for 54T:

- [Vso] \_\_\_\_\_
- [Vs1] \_\_\_\_\_
- [Vx] \_\_\_\_\_
- [Vy] \_\_\_\_\_
- [Vfe] \_\_\_\_\_
- [Va] \_\_\_\_\_
- [Vno] \_\_\_\_\_
- [Vne] \_\_\_\_\_

3. What is the best glide speed \_\_\_\_\_

4. What is the maximum allowable flap setting for take off? \_\_\_\_\_

5. The total usable fuel capacity is \_\_\_\_\_ US gallons. On a standard day the fuel consumption at 75% power cruise is \_\_\_\_\_ Gallons per hour.

6. The maximum oil capacity is \_\_\_\_\_ quarts, and the minimum is \_\_\_\_\_ quarts.

7. The maximum cross wind component that I will allow you to fly solo is \_\_\_\_\_ Kts.

8. How would you know to use carburetor heat?

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9. What is the take off and landing distance over a 50 foot tree for 54T? Assume gross weight, standard day at PAE.

- Take-off \_\_\_\_\_
- Landing \_\_\_\_\_

**Airport and Airspace:**

1. Describe the traffic pattern for each of the following runways at PAE:

- 34L \_\_\_\_\_
- 34R \_\_\_\_\_
- 16L \_\_\_\_\_
- 16R \_\_\_\_\_
- 11 \_\_\_\_\_
- 29 \_\_\_\_\_

2. What radio communications (if any) are required for operating at PAE?

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3. What radio communications (if any) are required for operating at an non-towered airport?

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4. What are the directions of the turns in a standard traffic pattern? Show an example of a nonstandard traffic pattern symbol.

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5. What is CTAF? \_\_\_\_\_ Do you use CTAF at PAE? \_\_\_\_\_ Explain:

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6. How do you know if a runway is closed?

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7. What are the dimensions of typical class "D" airspace?

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8. What communications are required for operation in class "D" airspace?

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9. You receive a communication from ATC that you don't understand or can not comply with safely, in your estimation. What would you do?

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10. What is the meaning of each of the following ATC light gun signals?

IN FLIGHT:

Steady green \_\_\_\_\_

Flashing green \_\_\_\_\_

Flashing red \_\_\_\_\_

Steady red \_\_\_\_\_

ON THE GROUND:

Flashing red \_\_\_\_\_

Flashing green \_\_\_\_\_

11. What is required with respect to certificates and endorsements for a student pilot to fly solo in class "B" airspace

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12. In addition to the equipment required to operate in class "D" airspace, what is required in class "B" airspace?

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13. Describe class "B" airspace boundaries, and how they apply to an airport within that airspace. Explain how you can use navigation equipment and/or ground reference points to identify the class "B" boundaries.

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14. You have called ATC prior to entering class "B" airspace and are told by ATC, "Squawk 2466 and ident." Are you now authorized to operated in the class "B" airspace? Explain

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15. On your Seattle Sectional, what does the dashed magenta line around Port Angeles airport signify

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16. Explain the minimum visibility and ceiling requirements for VFR flight within class "D" airspace.

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17. Can a student pilot request a special VFR clearance in class "D" airspace if the weather is less than VFR?

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18. Describe the dimensions of class "C" airspace, and communications prior to and for operation within this airspace.

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