



Pre-Solo Knowledge Test

General Questions

- 1) What personal documents and endorsements are you required to have before you fly solo?

- 2) What are your student pilot limitations regarding carriage of passenger or cargo and flying for compensation or hire?

- 3) Explain student pilot limitations concerning visibility and clearance of clouds.

- 4) Who has the final authority and responsibility for the operation of the aircraft when you are flying solo?

- 5) Discuss what preflight action concerning the airport and aircraft performance is specified in the regulations for a local flight.

- 6) During engine run up, you cause rocks, debris, and propeller blast to direct toward another aircraft or person. Could this be considered careless or reckless operation of an aircraft?

- 7) You may not fly as pilot of a civil aircraft within _____ hours after consumption of any alcoholic beverage, or while you have _____ % by weight or more alcohol in your blood.

- 8) What are the general requirements pertaining to the use of safety belts and shoulder harnesses?

- 9) What is the minimum fuel reserve for day VFR flight, and on what cruise speed is the fuel reserve based?

- 10) A transponder with "Mode C" is required at all times in all airspace at and above _____ feet MSL, excluding the airspace at and below _____ feet AGL.

11) What aircraft certificates and documents must be on board when you are flying solo? (AROW)

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

13) Who has the right-of-way when two aircraft are on final approach to land at the same time?

14) What action do you need to take if you are overtaking another aircraft and which aircraft has the right-of-way? What should you do if you are flying a head-on collision course with another aircraft? If another single-engine aircraft is converging from the right, who has the right-of-way?

15) Except when necessary for takeoffs and landing, what are the minimum safe altitudes when flying over a congested and other than congested areas?

16) If an altimeter setting is not available at an airport, what setting should you use before departing on a local flight?

17) What altitudes should you use when operating under VFR in level cruising flight at more than 3,000 feet AGL?

18) When practicing steep turns, stalls, and maneuvering during slow flight, the entry altitude must allow a recover to be completed no lower than _____ feet AGL.

19) When is a go-around appropriate?

20) What general steps should you follow after an engine failure in flight?

Aircraft Questions

1) List the minimum equipment and instruments that must be working properly in your aircraft for day VFR flight. (GOOSEACAT +2)

2) Fill In the V-speed definitions and the corresponding speed for your training airplane.

V_{so} _____

V_{s1} _____

V_x _____

V_y _____

V_{fe} _____

V_a _____

V_{no} _____

V_{ne} _____

3) What is the best glide speed for your training airplane?

4) The total usable fuel capacity for your aircraft is _____ gallons. On a standard day (sea level temperature, 59 F/altimeter 29.92 in. Hg.), the fuel consumption rate during normal (approximately 75% power) cruise is _____ gallons per hour.

5) The maximum oil capacity of your aircraft is _____ quarts, and the minimum oil capacity to begin a flight is _____ quarts.

6) The maximum crosswind component specified by your instructor for solo takeoffs and landings in the training aircraft is _____ knots.

7) When do you use carburetor heat? What are the indications of carburetor icing?

8) What is the takeoff and landing distance over a 50-foot obstacle for your aircraft at your airport? Assume maximum certified takeoff weight, 80 F, winds calm, and an altimeter setting of 29.52.

Airport/Local Airspace Questions

1) What are the traffic patterns for each runway at your airport? What is the MSL altitude for the traffic pattern?

- 2) How do you enter and exit the traffic pattern at your airport? What, if any, radio communications are required?

- 3) What radio calls are recommended in the traffic pattern at an uncontrolled airport? What radio calls are required at your airport?

- 4) What is the standard direction of turns in the traffic pattern?

- 5) What is CTAF? What is the CTAF frequency at your training airports(s).

- 6) How can you determine if a runway is closed?

- 7) If you receive ATC instructions that you feel may compromise safety or will cause you to violate FAR(s), what should you do?

- 8) What is the meaning of each of the following ATC light signals?
In Flight
 Steady green - _____
 Flashing green - _____
 Flashing red - _____
 Steady red - _____
On The Ground
 Flashing red - _____
 Flashing green - _____

- 9) In addition to equipment requirements and a student pilot certificate, what other requirement(s) if any, must be met before a student pilot is authorized to fly solo within Class B airspace?

- 10) Explain the general transponder equipment and use requirements(s) when operating within/near/or under Class B airspace

- 11) You have called ATC just prior to entering Class B airspace, and the controller tells you to, "Squawk 2466 and indent." Are you now allowed to enter Class B airspace without any further instructions? Explain.

12) On a sectional chart, what does a dashed magenta line around an airport indicate/a magenta haze?

13) Explain the minimum visibility and ceiling requirements for VFR flight in all airspaces.

14) You have called ATC prior to entering Class C/or D airspace, and the controller responds with your call sign and tells you to, "Standby." Are you now allowed to enter this airspace without any further instructions? Explain.

15) What local airspace are around your airport and where are their location?

Name: _____ Date Completed: _____

Instructor Name: _____ Signature: _____