



# PRE-SOLO / CHECKOUT WRITTEN EXAM

Student/Renter Name \_\_\_\_\_

Date \_\_\_\_\_ Grade \_\_\_\_\_ Graded by \_\_\_\_\_

## SELECT AN AIRCRAFT:

PA-28-180 \_\_\_\_\_ PA-28-161 \_\_\_\_\_

OTHER \_\_\_\_\_

As specified in 14 CFR Part 61, you must demonstrate satisfactory knowledge of appropriate portions of FAR part 61 and 91 to an authorized instructor. The demonstration must include the satisfactory completion of a written examination to be administered and graded by the instructor who endorses your student pilot certificate for solo flight. In addition to questions on the applicable regulations, the written exam must include questions on the flight characteristics and operational limitations for the make and model aircraft to be flown.

FAR 61.87(B), Pre-Solo Aeronautical Knowledge Exam, indicates that you also should have adequate knowledge to operate safely during solo flight in your local training environment. If the surrounding area includes controlled airspace, such as class B, C, D, or E airspace, you may be asked to answer appropriate questions on operations in these areas.

## General Questions

1. Define and list the following speeds for the aircraft:

Vs -

Vso -

Vx -

Vy -

Va -

Vfe -

Vno -

Vne -

2. What is the airplane's best glide speed and when is it used?

3. List the emergency procedure for ENGINE FAILURE DURING FLIGHT:

4. List the emergency procedure for ENGINE FAILURE IMMEDIATELY AFTER TAKEOFF:

5. List the procedure for a BALKED LANDING (Go-Around)

6. List the procedure for SPIN RECOVERY:

7. What is the maximum gross weight of the airplane in the Normal Category?
8. What is the total fuel capacity and usable fuel capacity? Total: \_\_\_\_\_  
Usable: \_\_\_\_\_
9. Under 14 CFR 91.3, whom is responsible for the operation of an aircraft?
10. Under 14 CFR 91.103, what preflight action is required for a Pilot-In-Command to do prior to a VFR flight not in the vicinity of an airport?
11. What is the maximum RPM of the engine?
12. How much horsepower does the engine produce?
13. What is the maximum and minimum oil capacity of the engine according to the POH and the what is the maximum and minimum oil capacity that TAG uses? MAX \_\_\_\_\_ MIN \_\_\_\_\_  
MAX \_\_\_\_\_ MIN \_\_\_\_\_
14. Define aerobatic maneuver:
15. What is 14 CFR 91.13 trying to prevent?
16. What is the minimum amount of time a pilot is required to wait after the consumption of alcohol?
17. What would happen to the fuel indicators if all electricity in the airplane was lost?
18. Why is it necessary to drain fuel out of the sumps after each refueling and before the first flight of the day?
19. List and describe each of the light gun signals available from ATC:
20. Will the engine still run if the battery and alternator are turned off in flight?

21. With which aircraft are wing-tip vortices (wake turbulence) the greatest? Describe the proper avoidance:

22. During a magneto check in the run-up, what is the maximum allowable RPM drop?

23. Draw an airport traffic pattern, labeling each leg and the proper entry and departure points.

24. Which turn direction is standard for an airport traffic pattern?

25. List the traffic pattern altitude, direction of turns, and CTAF radio frequencies for the following airports: Claremore (KGCM) - Pryor (H71)

26. When are you permitted to deviate from an ATC instruction?

27. What grade(s) of aviation fuel are approved for use? What color is each?

28. When an aircraft is approaching another head-on, each pilot should alter their course to the \_\_\_\_\_.

29. An \_\_\_\_\_ on the runway indicates that the runway is closed.

30. Draw the pavement marking requiring you to stop before entering a runway.

31. What must you do prior to entering Class C and D airspace?
32. What is the minimum safe altitude anywhere?
33. What is the minimum safe altitude over congested areas?
34. What documents must be on-board the aircraft at all times?
35. What is the minimum reserve fuel for day VFR operations?
36. What are the VFR weather minimums for Class D airspace?
37. What are the VFR weather minimums for Class E airspace (daytime)?
38. What are the VFR weather minimums for Class C airspace?
39. What are the VFR weather minimums for Class G airspace (daytime)?
40. What position must the fuel selector valve be in for takeoff and landing?
41. When is Carburetor Heat used?