Written Quiz Instructions: Answer each question in the space provided.

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

| | IAS | Definition |
|-----|-----|------------|
| Vs1 | | |
| Vs0 | | |
| Vx | | |
| Vr | | |
| Vy | | |
| Va | | |
| Vfe | | |
| Vno | | |
| Vne | | |

- 2. What is the airplane's best glide speed? When is it used? (POH)
- 3. List the procedure to respond to an in-flight engine failure. (POH and Airplane Flying Handbook)
- 4. List the procedure to respond to an engine fire on the ground while starting. (POH)
- 5. List the procedure for loss of communication radio when arriving at an airport with an operating control tower. (FAR)

Take-Home Test Instructions: Answer each question in the space provided, using the FARs, the AIM, the Airport/Facility Directory, FltPlanGO, and the Pilot's Operating Handbook. Use the space to the left of the question number to list the reference for each question.

Your Airplane

1. What is the fuel capacity? How much is usable? How many gallons per hour does it burn? (POH)

Fuel Capacity:

Useable Fuel:

Gallons/hour:

- 2. What is the maximum gross weight of the airplane in the Normal category? (POH)
- 3. What are the limit load factors in both the Normal and Utility categories with the flaps up and down? (POH)

| | Flaps Up | Flaps Down |
|---------|----------|------------|
| Normal | | |
| Utility | | |

- 4. What is the maximum rpm of your airplane? (POH)
- 5. Generally describe the engine in your airplane. (POH)

| 6. What grade(s) of aviation fuel is/are available for | 12. What is the take off ground roll for this aircraft today? (POH) |
|--|---|
| use? What color is each? (PHAK) | Pressure Altitude:ft |
| | Outside Air Tempt:° C |
| | Current wind direction and speed: |
| | Active runway: |
| 7. What is the oil sump capacity in your airplane? What | Headwind Component: |
| is the minimum? (POH) | Aircraft weight: |
| | Obstacle Height: Zero Feet |
| 8. During runup, what is the maximum allowable rpm drop? (POH) | Ground Roll: |
| 9. What would happen to the fuel indicators if all electricity in the airplane was lost? (POH, PHAK) | 13. What is the ground roll distance for a landing today? (POH) |
| | 14. What is the density altitude at Rochester if the elevation is 790 ft, the barometric pressure is 29.62 inches of mercury, and the temperature is 95° F? (POH) |
| 10. Why is it necessary to drain fuel out of the sumps | Pressure Altitude: |
| after refueling and before the first flight of the day? | Density Altitude: |
| | How will this density altitude affect the performance of the airplane? |
| 11. Will the engine still run if the master switch is turned off? Why? (POH, PHAK) | |
| | 15. Complete and attach a copy of a weight and balance from the POH with you as the pilot (solo) and full tanks. |

| Your Airport | 18. What are wing-tip vortices (wake turbulence)? With which aircraft are they greatest? Describe proper | |
|--|--|--|
| 16. Draw an airport traffic pattern on the back of this paper, labeling each leg and the proper entry and departure points. Which turn direction is standard for an airport traffic pattern? | avoidance. (PHAK, Boldmethod) | |
| 17. List the traffic pattern altitude, direction of turns, noise abatement procedures, and all radio frequencies for the following local area airports and their runways. (AF/D, FlightPlanGO) | 19. A(n) on the runway indicates that the runway is closed. (PHAK) | |
| KRCR | | |
| Runways: | 20. Draw the pavement marking requiring you to stop | |
| Frequencies: | before entering a runway. (PHAK) | |
| a. CTAF: b. AWOS: c. Emergency: Traffic Pattern Altitude: | 21. List and describe each of the light gun signals available from air traffic control. (PHAK, Boldmethod) | |
| Direction of turns: | | |
| Other Airport: | | |
| Runways: | | |
| Frequencies: | | |
| a. CTAF: b. AWOS: | | |

c. Emergency:_____

Traffic Pattern Altitude:

Direction of turns:

| Regulations (see FAR references at the end of this doc) | 27. If a glider is converging with an airplane, which has the right of way? |
|--|--|
| 22. What is the authority and responsibility of the pilot in command? | 28. What preflight action is required of a pilot prior to a flight? |
| | 29. When are you required to wear a safety belt? |
| 23. What endorsements are required for solo flight? What four documents must you have in your possession to solo an aircraft as a student? | 30. When are you permitted to deviate from an ATC instruction? |
| 24. What is the minimum amount of time after the consumption of alcohol a pilot is required to wait? | 31. When an aircraft is approaching another head-on, each pilot should alter their course to the |
| 25. What are the basic VFR weather minimums? What is the minimum visibility for a student pilot? | 32. List the definition of careless or reckless operation. |
| | 33. When is dropping objects from an airplane permitted? |
| 26. Define an aerobatic maneuver. | 34. The of two aircraft on approach to the same runway has the right of way. |
| | 35. What must a pilot do before entering Class D airspace? |

| 36. Except for take minimum safe alti | _ | what are the perate your airplane? | 41. What is the minimum reserve fuel required for day | |
|--|------------------|---------------------------------------|--|--|
| Over congested area:feet above the highest obstacle within feet horizontally. | | | VFR operations? | |
| Other than conges surface or away fr | | | | |
| structure. | | | 42. What are the weather minimums you need to fly solo? (according to the minimums set by your instructor) | |
| 37. List the day-VF and D airspace. | R weather minim | nums in Class G, E, | Visibility: | |
| | Visibility | Cloud | Ceiling Height: | |
| | Visibility | Clearance | Max Wind Velocity: | |
| Class G | | - Great arrec | Cross Wind Component: | |
| below | | | | |
| 10,000 MSL | | | 43. If your approval to solo the Cessna 172 was today. | |
| Class E | | | How long is this approval valid? | |
| below | | | | |
| 10,000 MLS | | | | |
| Class D | | | 44. You have been authorized to solo the Cessna 172 | |
| 38. List the docum at all times. | ents that must b | e aboard the aircraft | and want to solo the Piper Cherokee. What needs to be done before you can solo the Piper Cherokee? | |
| A | | | | |
| R | | | FAR References | |
| 0 | | | It is recommended that you tab these regulations in | |
| W | | | your FAR/AIM | |
| | | | a. Eligibility requirements for student pilots (61.83) | |
| 39. When must the aircraft's navigation lights be on? | | | b. Solo flight requirements for student pilots (61.87) | |
| | | | c. General limitations (61.89) | |
| 40. What are you, as a student pilot, required to have before operating in Class B airspace? | | | d. Responsibility and authority of the pilot in command (91.3) | |

| e. Careless or reckless operation (91.13) | a. Wake turbulence |
|---|--------------------|
| f. Dropping objects (91.15) | |
| g. Alcohol or drugs (91.17) | |
| h. Portable electronic devices (91.21) | |
| i. Preflight action (91.103) | Student: |
| j. Use of safety belts, shoulder harnesses and child restraint systems (91.107) | Instructor: |
| k. Right-of-way rules (91.113) | |
| I. Minimum safe altitudes (91.119) | |
| m. Altimeter settings (91.121) | |
| n. Compliance with ATC clearances and instructions (91.123) | |
| o. ATC light signals (91.125) | |
| p. Operating on or in the vicinity of an airport in Class G airspace (91.126) | |
| q. Operating on or in the vicinity of an airport in Class E airspace (91.127) | |
| r. Operations in Class D airspace (91.129) | |
| s. Operations in Class C airspace (91.130), as necessary | |
| t. Operations in Class B airspace (91.131), as necessary | |
| u. Restricted and prohibited areas (91.133) | |
| v. Fuel requirements for flight in VFR conditions (91.151) | |
| w. Basic VFR weather minimums (91.155) | |
| x. Civil aircraft: Certifications required (91.203) | |
| y. Aircraft lights (91.209) | |
| z. Aerobatic flight (91.303) | |

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