

Pre-Solo Take Home Test



NORTHWEST
FLIGHT SCHOOL

Name _____

Instructor Checked _____

Date _____

Instructions: Answer each question in the space provided.

1. What is the maximum gross weight of the airplane in the normal category? Utility category? (POH)

2. If a glider is converging with an airplane, which has the right of way?(FARs)

3. What are the limit load factors in both the normal and utility categories with flaps up and down? (POH)

4. What preflight action is required of a pilot prior to a flight? (FARs)

5. What is the maximum rpm of your airplane's engine? (POH)

6. Define an aerobatic maneuver. (AIM)

7. Generally describe the engine in your airplane. (POH)

8. List the definition of careless or reckless operation. (FARs)

9. What is the Minimum _____ qts and Maximum _____ qts oil capacity in your airplane? (POH)

10. What is the minimum amount of time after the consumption of alcohol a pilot is required to wait before flying? (FARs)

11. What would happen to fuel indicators if all electricity in the airplane is lost? (POH)

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12. What are the basic VFR weather minimums? What is the minimum visibility for a student pilot? (FARs)

13. Why is it necessary to drain fuel out of the sumps after refueling and before the first flight of the day?

14. List and describe each of the light gun signals available from air traffic control. (AIM)

15. Will the engine still run if the master switch is turned off? Why or why not?

16. What are wingtip vortices (wake turbulence)? With which aircraft are they greatest? Describe proper avoidance.

17. What endorsements are required for solo flight? What personal documents must you have in your possession to solo an aircraft as a student? How long does the endorsement last? (FARs)

18. During runup and performing a mag check, what is the maximum allowable rpm drop? What is the maximum allowable difference between the amounts of drop for each mag? What should you do if the mag drop is greater than allowed?

19. When do you use carburetor heat? What are the indications of carburetor ice?

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20. Draw an airport traffic pattern, labeling each leg and the proper entry and departure points. Which turn direction is standard for an airport traffic pattern?

21. List the traffic pattern altitude, direction of turns, and radio frequencies for Spokane International Airport.

22. What are the recommended radio calls for a non-controlled airport?

23. What is the fuel capacity of your airplane? _____ Gal. How much is usable? _____ Gal. (POH)

24. What is the authority and responsibility of the pilot in command? (FARs)

25. When are you required to wear a safety belt? (FARs)

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

27. What grade(s) of aviation fuel is/are available for use in your aircraft? List their colors. (POH)

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28. When an aircraft is approaching another head-on, each pilot should alter their course to the _____.(FARs)
29. A(n) _____ on the runway indicates that the runway is closed.
30. Draw the pavement marking requiring you to stop before entering the runway.
31. The _____ of two aircraft on approach to the same runway has the right of way. (FARs)
32. What must a pilot do before entering Class D airspace?
33. What is the minimum safe altitude anywhere? Over congested areas? (FARs)
34. List the day-VFR weather minimums in class G, E, D, and C airspace. (FARs)
35. List the aircraft documents that must be aboard the aircraft at all times. (FARs)
36. When must the aircraft's navigation lights be on?
37. What are you, as a student pilot, required to have before operating in class B airspace? (FARs)
38. What is the minimum reserve fuel required for day VFR operations? Night VFR? (FARs)

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39. What is the maximum passenger and baggage load if carrying full fuel? (POH)
40. Perform a weight and balance calculation for the given payload. Use the current airplane empty weight and balance. Attach a separate sheet.
Pilot and front passenger: 350
Rear passengers: 200
Baggage: 50
Fuel: _____ Weight _____ Gal. Determine how much fuel is allowed.
41. What is the maximum demonstrated crosswind component? _____ (POH)
42. What is the maximum crosswind component specified by your instructor for solo take and landings.

43. Determine the take-off and landing distance over a 50 ft obstacle for 15 degrees celsius at KGEG.
44. Determine the cruise performance at 7000 MSL on a standard day given 2400 rpm.
Gallons per hour _____
True airspeed _____
45. List the procedure for an in-flight engine failure after lift-off and below 500 AGL. (POH)
46. Describe the local class C airspace. When should you contact approach control when returning to the airport? List the Frequencies you can use?
47. 1. Define and list the following speeds for your aircraft (POH):
- Vs-
 - Vso-
 - Vx-
 - Vy-
 - Va-
 - Vfe-
 - Vno-
 - Vne-

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48. What is the airplane's best glide speed? When is it used? (POH)

49. List the procedure to respond to an in-flight engine failure. (POH)

50. List the procedure to respond to an engine fire on the ground while starting. (POH)

51. List the procedure for loss of communication radio when arriving at an airport with an operating control tower. (AIM)

52. When is a go-around appropriate? How do you execute a go-around? (POH)

53. As a student pilot, can you fly with passengers after you are endorsed for solo flight?

54. What are the limitations for a student pilot?

55. What is maximum oil temperature for your airplane?

56. What is the recovery procedure for an inadvertent spin?

57. What equipment is required to operate Day VFR? (FARs)

58. What equipment is required to operate Night VFR? (FARs)

59. When do you use carb heat?

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60. Explain what you would do if a large aircraft departed just as you were coming in to land?

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61. Which of the required documents on board an aircraft has to be in view?

62. What powers the flaps? (POH)

63. What is the maximum allowable baggage you can put in the baggage compartment of your airplane? (POH)

64. As a student pilot, are you allowed to carry passengers while acting as pilot in command?