

# Pre-Solo Written Test

Name: \_\_\_\_\_ Date: \_\_\_\_\_

Note: you will need to use the POH to answer some of these questions

1. What age and medical requirements must a student meet in order to be able to solo?  
\_\_\_\_\_
2. What section of the FARs (CFRs) covers pilot certification? \_\_\_\_\_
3. Student Pilot Limitations:
  - a) May a Student pilot carry passengers? \_\_\_\_\_
  - b) May a Student pilot fly solo at night? \_\_\_\_\_
  - c) May a student pilot fly for any business related reason? \_\_\_\_\_
  - d) When may a student fly to another airport without a logbook endorsement by the instructor for that particular flight? \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_
  - e) How recently must the student's logbook have been endorsed to allow solo flight?  
\_\_\_\_\_
  - f) What is required before a student may operate an aircraft in class B airspace?  
\_\_\_\_\_  
\_\_\_\_\_
4. What are the required documents on board an aircraft at all times?  
\_\_\_\_\_
5. As a solo student pilot, what document(s) must you carry at all times? When on a solo cross-country flight? \_\_\_\_\_  
\_\_\_\_\_
6. What are the basic VFR visibility requirements (class C, D or E airspace below 10,000 ft MSL): \_\_\_\_\_
7. When is a mode-C transponder required? \_\_\_\_\_  
\_\_\_\_\_
8. What does "mode-C" mean? \_\_\_\_\_
9. At a tower controlled airport, what information should you give the tower on the initial radio call? \_\_\_\_\_
10. At a tower controlled airport, what does a "double-solid, double-dashed" yellow line on the taxiway mean? When may it be crossed? \_\_\_\_\_  
\_\_\_\_\_
11. What do the numbers on the end of the runway indicate? \_\_\_\_\_
12. When flying near an uncontrolled airport, radio communications are broadcast "in the blind". What information should be in each of your transmissions? \_\_\_\_\_  
\_\_\_\_\_
13. If the airport elevation is 520 ft, what is the traffic pattern altitude? \_\_\_\_\_
14. If an altimeter setting is not available, how should you set the altimeter before flight?  
\_\_\_\_\_

15. If an altimeter setting is available, how much difference can there be in the altimeter indication and the actual field elevation for the altimeter to be "airworthy" ? \_\_\_\_\_
16. What is the proper way to enter the landing pattern at an uncontrolled airport?  
\_\_\_\_\_
17. When are two way radio communications established? \_\_\_\_\_
18. What are you checking during the pre-flight engine run-up? \_\_\_\_\_
19. If you are taxiing with a tail wind from the right, how should the elevator and ailerons be positioned? \_\_\_\_\_
20. Why do you need to use right rudder during take off and climb? \_\_\_\_\_
21. What are the legs of the traffic pattern called? \_\_\_\_\_
22. When do you use Carburetor heat and why? \_\_\_\_\_
23. What does the "mixture" control do? For touch-n-goes where should it be? \_\_\_\_\_
24. Why do we use flaps in the landing pattern? \_\_\_\_\_
25. In case of engine failure shortly after take off, what is the best course of action? \_\_\_\_\_
26. In case of engine failure at any time, what does "ABC" mean? What should you use for "A"? \_\_\_\_\_
27. Briefly state why it is important to use checklists \_\_\_\_\_

**Aircraft Specific – Use the POH for your solo airplane:**

28. For each of the following airspeeds, provide both the speed for the aircraft you will be flying and the definition of the V speed.
- a)  $V_R$  \_\_\_\_\_
  - b)  $V_X$  \_\_\_\_\_
  - c)  $V_Y$  \_\_\_\_\_
  - d)  $V_{NE}$  \_\_\_\_\_
  - e)  $V_{SO}$  \_\_\_\_\_
  - f)  $V_{fe}$  \_\_\_\_\_
  - g)  $V_{approach}$  \_\_\_\_\_
29. What flight instruments need to be set before take off on every flight?  
\_\_\_\_\_
30. How much gas does this aircraft hold? \_\_\_\_\_ How much of that capacity is considered to be usable? \_\_\_\_\_
31. How many minutes of fuel remaining are you required to have on landing (during day,

VFR flight)? \_\_\_\_\_ (Given the accuracy of the fuel gages in a light airplane, is this a good idea? \_\_\_\_\_)

32. What is the empty weight of this aircraft? \_\_\_\_\_

33. What is the maximum weight of this aircraft? \_\_\_\_\_

34. At what speed should the aircraft be flying at mid-field downwind? \_\_\_\_\_ on base? \_\_\_\_\_ on short final? \_\_\_\_\_ (flaps down)

**Airport Specific: Boeing Field International (BFI)**

35. For Boeing Field (BFI) Fill in the following frequencies:

a) ATIS: \_\_\_\_\_

b) Ground Control: \_\_\_\_\_

c) Tower for 13R/31L: \_\_\_\_\_ (big runway)

d) Tower for 13L/31R: \_\_\_\_\_ (small runway)

36. What class airspace is BFI? \_\_\_\_\_

37. Describe a Valley Departure, assume you are departing from 31R. Provide relevant landmarks, and altitudes. What landmark provides reference for leaving the BFI airspace?

\_\_\_\_\_

38. When departing towards Bellevue, what is the altitude limit (due to SEA Class B) over Mercer Island? \_\_\_\_\_ Over Bellevue? \_\_\_\_\_ East of Lake Sammamish?

\_\_\_\_\_

39. Describe a Vashon Departure and Vashon Arrival assuming that 13R/13L are active. Include the land marks and altitudes to fly from take off to Vashon and back:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

You're done!