

Advantage Aviation Inc.

PRE-SOLO KNOWLEDGE TEST

Student: _____

Date: _____

Instructor: _____

Date of Review: _____

Student Acknowledgement of Review: _____

FAR PART 61

1. What four things must you have with you in order to act as pilot in command during solo flights? _____

2. How long is your student pilot certificate valid for? _____

3. How long is your medical certificate valid for? _____

4. On any given day, what is the latest time you can solo? _____

5. Are you allowed to carry passengers on solo flights? _____
6. What additional limitations to your solo privileges are part of your solo endorsement? _____

7. Under what conditions can you fly solo in Class B airspace? _____

FAR PART 91

8. Under what conditions, during your solo flight, may you deviate from any FARs? _____

9. Excluding preflighting the airplane, how do you determine an aircraft is airworthy prior to solo flight? _____

10. You have had one glass of wine at 11:00pm. Your solo flight is scheduled for 8:00am the next morning. Can you legally fly solo? _____

11. Are you required to obtain a weather briefing prior to a solo flight? If so when and where can you get the briefing from? _____

12. What is the legal minimum safe altitude when flying over a congested area? _____

13. On your way back from a solo flight to Palo Alto your communication radios fail. The tower is operational. What do you do? _____

14. Provide an example of a TFR that may be issued affecting flights at Palo Alto Airport. _____

15. While in flight, what are the meanings of the following light gun signals.

Steady Red _____

Steady Green _____

Flashing Green _____

16. What is the minimum fuel reserve required for day VFR operations? _____

17. What are the day VFR weather minimums to operate in class G, E and D airspace? _____

18. What documents must be on board the aircraft at all times? _____

19. After the run up, while getting ready to ask the tower for a take off clearance, you realize that the attitude indicator is still not showing a level attitude. More than 5 minutes have passed since starting the engine and, therefore, you assume the instrument is inoperative. Is the airplane legal to fly? What should you do? _____

20. Unless otherwise instructed by ATC, what transponder code should you squawk? _____

21. What are the required aircraft inspections required for VFR flight? _____

22. Returning from a solo flight you find out there is a disabled aircraft on the runway at KPAO. The tower advises they aren't sure how long the runway will be closed. What will you do? _____

PALO ALTO AIRPORT OPERATIONS

23. List all radio frequencies associated with your home airport, including for the fuel truck. _____

24. Draw the traffic pattern for each runway at Palo Alto airport, labeling each leg and the proper entry and departure points. _____

25. Describe the noise abatement procedure for the Palo Alto airport. _____

26. When flying to the coast, describe the available VFR departure procedures. _____

27. Name three charted reporting points that can be used to inform Palo Alto tower of your position when inbound from either the east or the west. _____

28. Upon contacting Palo Alto tower while inbound to the airport, they reply with "Aircraft calling Palo Alto tower, Stand by". Are you permitted to enter the Class D airspace? _____

29. Name two common practice areas for performing maneuvers. Also, what are the recommended altitudes to never be below while performing any maneuver?

30. Name any two examples of how your flight instructor has taught you to mitigate any risk encountered during a routine flight to a practice area or airport. _____

AERODYNAMICS

31. What effect does the bank angle have on the stall speed if the airplane is being maintained at a constant altitude? _____

32. Describe the Power-off stall recovery technique to be used for your airplane. _____

33. Why is rudder necessary in a turn? _____

34. What are the published maneuvering and best glide speeds for your airplane. _____

WEATHER

35. Runway 31 is in use. The reported wind from the ATIS is 340 @ 12kts. What is the crosswind component and is it within your logbook limitation? (If no limitation has been entered use the club by laws limitations) _____

36. Runway 31 is in use. METAR KPAO 1547Z 03012KT 10SM SCT 040 15/13 A30.01. What is the crosswind component? _____

37. What is windshear and why is it dangerous? _____

38. How do you recognize windshear from the cockpit when it is happening and what can you do about it? _____

AIRCRAFT SYSTEMS GENERAL

39. When you drain the fuel sumps you discover clear liquid in the tester. What could this be and is it acceptable for use in the airplane? _____

40. What happens to the engine on your airplane if you switch off the master switch? _____

41. How will you know if the alternator has failed while flying, and what action should you take? _____

42. How many times should you attempt to reset a circuit breaker if it pops? _____

43. During the run-up, if the engine is rough during the magneto check, what action should you take to restore smooth operation? _____

44. Describe when a flooded start procedure would be necessary and how you would perform it. _____

EMERGENCIES

45. What should you do in the event of an electrical fire in flight? _____

46. What should you do if an engine fire occurs during engine start? _____

47. What should you do if the engine fails when not near an airport? _____

ADVANTAGE AVIATION CLUB RULES

48. Can you do touch and go's at Palo Alto while flying solo? _____

49. Can you fly at night? _____

50. You come to the club for a solo flight. No instructor is present, only the front desk person is there. Can you go fly solo? Why? _____

51. You are at the club and want to fly solo. An instructor is present, checks your logbook, but tells you he/she is going on a flight or leaving the club. Can you go on your solo flight? _____

52. Who must you check with prior to any solo operations? _____

53. Under what conditions should you pull the airplane out if its parking spot prior to engine start? _____

54. Can you attempt to "angle" the airplane into its spot while taxiing in? _____

55. If mechanical irregularities are noted during a preflight inspection, to whom should you report them and when? _____

56. If the hobbs meter in the airplane shows something other than the entry in the tach book what should you do? _____

57. What part(s) of this METAR, KPAO 2147Z 36012KT 8SM 06SCT 100BKN 20/12 A3012 makes it so you can't fly solo according to club rules? _____

58. When must covers or window shades be re-installed on the airplane? _____

STUDENT PILOT SINGLE ENGINE CHECKOUT FORM

Aircraft Make & Model: _____

AIRSPEEDS Knots/Miles per hour (circle one)

V_S: _____

V_{SO}: _____

Rotate V_R: _____

V_Y: _____

V_X: _____

V_A: _____

Normal Landing: _____

Max Window Open: _____

Cruise climb: _____

V_{FE}: _____

Short field approach: _____

Best glide: _____

Go around: _____

V_{NE}: _____

Max crosswind: _____

ENGINE

Manufacturer: _____

Horsepower: _____

Model: _____

Type: _____

OIL

Absolute minimum: _____

Maximum: _____

Minimum for operation: _____

Grade: _____

FUEL

Grade: _____

Max Capacity (total): _____

Max Capacity (usable): _____

Color: _____

Max total cap. at tabs: _____

Max usable cap. at tabs: _____