

Answers to Cessna 182 Skylane Test Questions

1. Total fuel capacity is 92 gallons. Total usable fuel is 88 gallons.
Refer to POH, Section 1, General.
2. The recommended fuel grade is 100LL grade aviation fuel (blue) or 100 grade aviation fuel (green).
Refer to POH, Section 2, Limitations.
3. To ensure maximum fuel capacity when refueling and minimize cross-feeding when parked on a sloping surface, place the fuel selector valve in either the LEFT or RIGHT position.
Refer to POH, Section 2, Limitations.
4. The endurance, including start-up, taxi, takeoff, and climb, with a 45-minute reserve at a cruise altitude of 10,000 feet at standard temperature is:
With full tanks at 65% power: 6.8 hours
With 65 gallons at 65% power: 4.7 hours
Refer to POH, Section 5, Performance.
5. The minimum oil capacity is nine quarts. Fill to 10 quarts for normal flights of less than three hours. For extended flight, fill to 12 quarts.
Refer to POH, Section 7, Airplane & Systems Descriptions or Section 8, Handling, Service, & Maintenance.
6. The recommended oil type and viscosity is MIL-L-6082 aviation grade straight mineral oil during the first 25 hours, and ashless dispersant oil conforming to Continental Motors Specification MHS-24 and all revisions thereto after the first 25 hours.
Refer to POH, Section 1, General or Section 8, Handling, Service, & Maintenance.
7. The maximum takeoff weight is 3,100 lb. The maximum landing weight is 2,950 lb.
Refer to POH, Section 1, General.
8. The airplane will carry 772 lb payload with maximum fuel.
Refer to POH, Section 6, Weight & Balance/Equipment List.
9. You can carry full fuel (92 gallons) with the 750 pounds of payload.
Refer to POH, Section 6, Weight & Balance/Equipment List
10. The CG range is 33.0 inches–46.0 inches.
Refer to POH, Section 2, Limitations.
11. The distance required to clear a 50-foot obstacle during takeoff under the following conditions:
3,100 lb, sea level, 85 degrees F: 1,680 feet
3,100 lb, 7,000 feet, 80 degrees F: 3,498 feet
Refer to POH, Section 5, Performance.
12. The rate of climb and airspeed at 3,100 lb, 8,000 feet, OAT 20 degrees C is 380 fpm at 76 KIAS.
Refer to POH, Section 5, Performance.
13. The fuel consumption and TAS are 11.2 gph and 132 KTAS.
Refer to POH, Section 5, Performance.
14. The maximum demonstrated crosswind velocity is 15 knots.
Refer to POH, Section 4, Normal Procedures.
15. The maneuvering speed at max gross weight is 111 KIAS.
Refer to POH, Section 2, Limitations or Section 4, Normal Procedures.
16. During takeoffs and landings, the fuel selector valve handle must be in the BOTH position. (Operation on either left or right tank is limited to level flight only.)
Refer to POH, Section 2, Limitations.
17. The best glide speed at maximum gross weight is 76 KIAS. The best glide speed at 2,600 lb is 70 KIAS.
Refer to POH, Section 3, Emergency Procedures.
18. A vacuum system failure will be indicated by a low vacuum warning light on the annunciator panel. The DG and attitude indicator will be inoperative, and the suction gauge will be indicating out of normal operating range (4.5" – 5.4").
Refer to POH, Section 3, Emergency Procedures and Section 7, Airplane & Systems Descriptions.

19. A complete vacuum failure would affect the DG and attitude indicator.
Refer to POH, Section 3, Emergency Procedures.
20. There are 3 fuel drains: one under the right wing, one under the left wing, and one under the nose.
Refer to POH, Section 4, Normal Procedures.
21. Carb ice is detected by an unexplained drop in MP, and eventual engine roughness may result.
Refer to POH, Section 3, Emergency Procedures.
22. Remove carb ice by applying full throttle and pulling the carb heat knob out until the engine runs smoothly. Then remove carb heat and adjust the throttle. (Note: It is normal for the engine to run rough as the carb heat begins working—the engine will smooth out again once the carb ice has been removed.)
Refer to POH, Section 3, Emergency Procedures.
23. An alternator failure is indicated by a low voltage warning light, and a discharge rate on the ammeter.
To bring the alternator back online, turn the avionics switch OFF, check that the ALT circuit breaker is in, turn the master switch OFF, then turn the master switch ON.
If unable to restore the alternator, minimize the drain on the battery and land as soon as possible.
Refer to POH, Section 3, Emergency Procedures.
24. The turn coordinator will be inoperative if the aircraft has a dead battery.
Refer to POH, Section 7, Airplane and Systems Descriptions.
25. The speeds and flap settings for takeoffs and landings are:
Normal takeoff – rotate 50 KIAS, climb 80 KIAS – Flaps up
Normal landing – 60-70 KIAS – Flaps down
Short-field takeoff – rotate 50 KIAS, climb 59 KIAS – Flaps 20°
Short-field landing – 61 KIAS – Flaps down
Refer to POH, Section 4, Normal Procedures.
26. The emergency descent procedure is to put the mixture full rich, carb heat on, and reduce power for a 500-800 fpm descent. Adjust the trim for an 80 KIAS descent and keep hands off the control wheel. Monitor the turn coordinator and make corrections with the rudder. Adjust rudder trim if needed. Resume normal cruising flight at the completion of the descent.
Refer to POH, Section 3, Emergency Procedures.
27. List the following indicated airspeeds:

Rotation, Vr	50 KIAS
Never exceed, Vne	179 KIAS
Maximum flaps extended, Vfe	95 KIAS (full flaps)
Stall, clean configuration, Vs	50 KIAS
Stall, full flaps, Vso	40 KIAS
Normal operating, Vno	143 KIAS
Best angle of climb, Vx	59 KIAS
Best rate of climb, Vy	81 KIAS

 Refer to POH, Section 2, Limitations and Section 4, Normal Procedures.
28. The normal full flaps approach speed is 60-70 KIAS.
Refer to POH, Section 4, Normal Procedures.
29. The procedure for a go-around is: power 2,400 rpm, carburetor heat cold, retract the flaps to 20 degrees and climb at 55 KIAS, retract the flaps to full up after reaching 70 KIAS, open cowl flaps.
Refer to POH, Section 4, Normal Procedures.
30. Following an engine failure in flight, attempt to restart using the following procedures: maintain 75 KIAS, carburetor heat - ON, fuel selector valve - BOTH, mixture - RICH, ignition switch - BOTH (or START), primer - IN and LOCKED.
If that is unsuccessful, prepare for an emergency landing. Maintain 75 KIAS, secure seat belts/shoulder harnesses, mixture - IDLE CUT-OFF, fuel selector - OFF, ignition switch - OFF, flaps as required, master switch - OFF, doors unlatch prior to touchdown, apply brakes heavily.
Refer to POH, Section 3, Emergency Procedures.