

PA-28(F) and PA-28R Test Questions

The purpose of this open-book test is to familiarize the pilot with the PA-28(F) Cherokee and PA-28R Arrow, and their corresponding POHs. There are many variations in the models. The 1976 Archer II was chosen as the test airplane; answers given pertain to that aircraft. Refer to the POH for your aircraft as you complete the test. The questions preceded by an asterisk (*) pertain to retractable-gear only (Arrow). Those questions preceded by two asterisks (**) pertain to fuel-injected engines. The test airplane for those questions is the 1979 Arrow IV.

1. What is the total fuel capacity? _____ gallons Usable? _____ gallons
2. What is the correct fuel grade? _____
3. Where are the fuel drains located, and when are they drained? _____
4. What is the recommended grade and type of oil? _____
5. What is the minimum operating oil level? _____
6. Empty weight? _____ Useful load? _____
7. Maximum gross takeoff weight? _____
8. What are the recommended airspeeds (KIAS) and flap settings for:
Normal takeoff, flaps up _____ Soft-field landing, flaps down _____
Normal landing, flaps down _____ Short-field takeoff, flaps 25 degrees _____
Soft-field takeoff, flaps 25 degrees _____ Short-field landing, flaps down _____
9. What is the economy cruise fuel consumption at 65% power, 8,000' density altitude, and maximum gross weight? _____
10. List the following airspeeds:
Best rate of climb (V_y) _____ Stalling speed, clean (V_s) _____
Best angle of climb (V_x) _____ Stalling speed, full flaps (V_{so}) _____
Maneuvering speed, gross weight (V_a) _____ * Stalling speed full flaps, gear down (V_{so}) _____
Maximum flap extension (V_{fe}) _____ Best gliding _____
* Maximum gear extension (V_{lo}) _____ Never exceed (V_{ne}) _____
11. What is the maximum demonstrated crosswind component? _____
12. * What are the unsafe gear indications? _____
13. * What is the procedure for emergency gear extension? _____
14. How do you detect carburetor or induction ice? _____
15. How do you prevent carburetor or induction ice? _____
16. In the event of carburetor or induction ice, what is the proper procedure? _____
17. ** What is the purpose of the engine alternate air control? _____
18. What would be the indication of alternator or generator malfunction? _____
19. How would you restore electrical power? _____
20. What would you do if unable to restore the alternator/generator power? _____
21. In the event the vacuum pump failed (no backup systems), what flight instruments would **not** be available? _____
22. In the event the electrical system failed, what flight instruments would **not** be available? _____
23. Where is the alternate static source (if installed) located? _____
24. What flight instruments would be available if the static system was plugged up and there was no alternate static source? _____

25. What is the power setting, TAS, and fuel consumption for the following at maximum gross weight?
65% power, 7,000', standard temperature
Manifold pressure/rpm _____ TAS _____ Fuel consumption _____
26. What aircraft documents must be on board during flight? _____
27. What is the engine failure procedure immediately after takeoff? _____