FLYBLOCKTIME
PA-28-140/160 Aircraft Type Checkout and Currency Quiz

Pilot's Name _____

Date _____

NOTE: There may be one or more correct answers to each question.

1) The engine in a PA-28-140/160 is a
A. Continental 0-300
B. Lycoming 0-320
C. Lycoming 0-235
D. Lycoming 0-540

2) The STC for this engine requires a minimum of ____ degrees Fahrenheit prior to power application for run up.
A. 32 (yellow)
B. 65 (yellow)
C. 75 (green)
D. 125 (green)

3) The quantity of oil in the engine for flight should be
A. 4 quarts minimum, 6 quarts maximum
B. 30 pounds minimum, 42 pounds maximum
C. 6 quarts minimum, 8 quarts maximum
D. 7.5 pounds minimum, 10 pounds max

4) The type of oil normally in the engine should be
A. SAE rated SE (severe environment) multi-viscosity
B. Aviation grade ashless dispersant (AD) of appropriate viscosity
C. SAE 15 W 50 detergent oil
D. Aviation grade "straight mineral oil"

5) The correct type of fuel for the PA-28-140/160 (excepting any special STC) is
A. Aviation 80, 100LL, or 100/130 fuel
B. Automotive high test
C. Aviation 100LL or 100/130 fuel 100LL
D. Aviation 100LL (light blue) fuel only

6) The usable capacity of the fuel tanks (fully fueled) in a PA-28-140/160 aircraft is
A. 38 US gallons
B. 48 US gallons
C. 50 US gallons
D. 50 Imperial gallons

7) Under normal circumstances (leaned) the PA-28-140/160 burns approximately
A. 6.5 gph at cruise power
B. 7.5 gph at cruise power
C. 9.5 gph at cruise power
D. 10.5 gph at cruise power

8) The maximum demonstrated cross-wind component for the PA-28-140/160 is
A. 10 knots
B. 15 knots
C. 17 knots
D. not specified, therefore 20 % of the stall speed

9) The maximum gross takeoff weight for the PA-28-140/160 aircraft is
A. 1950 pounds
B. 2150 pounds
C. 2350 pounds
D. 2440 pounds

10) The mechanical flaps work in 'notches' on the PA-28-140/160. What are the degrees represented by the four settings?
A. 0, 5, 10, 30.
B. 0, 10, 20, 40.
C. 10, 20, 30, 40.
D. 0, 10, 25, 40.

11) What flap setting is recommended by the manufacturer for a short field takeoff?
A. No Flaps.
B. 10 degrees.
C. 20 degrees.
D. 25 degrees.

12) V_{fe}, the maximum flap extension speed in the Cherokee, is:
A. 100 MPH
B. 115 KIAS
C. 115 MPH
D. 129 MPH

13) The rough air or maneuvering speed is:
A. 100 MPH
B. 115 KIAS
C. 115 MPH
D. 129 MPH

14) Best rate of climb speed for the PA-28-140/160 at gross weight at sea level is
A. 85 KIAS
B. 85 MPH
C. 79 MPH
D. 74 MPH

15) Best angle-of-climb speed for the PA-28-140/160 at gross weight at sea level is
A. 85 KIAS
B. 85 MPH
C. 79 MPH
D. 74 MPH
E. Both (a) and (b) with and without flaps respectively

16) Recommended final-approach indicated airspeed for short field, full flap landing is:
A. 65 MPH
B. 50 MPH
C. 73 MPH
D. 57 MPH

17) Recommended short-field flap setting, and initial-climb airspeed for best obstacle clearance for the Cherokee are:
A. 0 degrees, and 65 MPH
B. First "notch," 74 MPH
C. 25 degrees (second "notch"), 74 MPH
D. 40 degrees (third "notch"), 74 MPH

18) Stall speed without flaps (V_s) for the Cherokee is
A. 52 MPH
B. 56 MPH
C. 63 MPH
D. 65 MPH

19a) What is the longest IFR leg from departure to destination allowed to be planned for a Cherokee with fuel to the tabs?
(Assume that the approaches, holding, and flight to the alternate will require 40 minutes beyond the time required from departure to original destination.)
A. 1:20
B. 2:20
C. 2:45
D. 3:30

19b) Alternate question for VFR pilots: What is the longest VFR leg allowed to be planned for a Cherokee with fuel to the tabs under VFR?
A. 3:00
B. 2:20
C. 1:50
D. 4:40

20) Assuming standard temperature, best power mixture, and gross weight, approximately what RPM is required to achieve 65% power at 7,000 feet?
A. 2500 RPM
B. 2520 RPM
C. 2600 RPM
D. 2440 RPM

21) A flight is planned to Mountain Air, an airport in the North Carolina mountains. Field elevation is 4432 feet; the single paved runway is 2900 feet long, with 50-foot obstacles within 200 feet of both ends of the runway. OAT at field elevation is 24 C.
Assume no wind, maximum gross weight, and the use of short field techniques.
According to the POH, what are the needed landing and take-off distances?
Landing _____ ft.
Takeoff _____ft.

22) In the event of a complete engine failure in flight, what is the best glide speed?
A. 70 MPH
B. 73 MPH
C. 80 MPH
D. 83 MPH

23) Which of the following is true about the Cherokee electrical system?
A. It is a 12-volt system with a 14-volt 100 ampere alternator
B. It is a 12-volt system and the battery is under the rear passenger seat. A special booster cable may be plugged into the external power receptacle for externally-powered starts.
C. It is a 12-volt system and the battery is in the engine compartment.
D. It is a 24-volt system and the battery is under the rear passenger seat.

24) If no output is indicated on the ammeter during flight, the POH recommends
A. Resetting the field circuit breaker if open and then recycling the ALT switch to reset the overvoltage relay
B. Landing at the nearest airport
C. Turning off the BAT master switch to avoid overheating and a possible electrical fire
D. Maintaining a minimum electrical load if output cannot be restored

25) A pilot observing rapid altimeter fluctuations and erratic oscillations in the vertical speed indicator should
A. Break the case of the vertical speed indicator to admit static air to the system
B. Suspect a pitot tube blockage and turn on the pitot heat
C. Suspect water in the static line and attempt to drain the water through the drain valves located on the lower left fuselage wall
D. Suspect a broken or leaking static line and snag it for maintenance

26) The Cherokee POH (and TC AIM) recommend against the use of strobe lights
A. During daylight hours
B. When the ammeter registers a discharge
C. When taxiing in the vicinity of other aircraft
D. On dark, clear nights

27) The flaps on the Cherokee
A. Must be placed in the UP or retracted position before they will lock and support weight.
B. May be lowered at speeds up to and including 113 knots, although a slower speed will reduce operating loads
C. Are deployable in positions of 10, 20, and 30 degrees
D. Improve controllability when taxiing in windy conditions

28) The gyroscopic instruments (attitude indicator and heading indicator) may be damaged by
A. Vacuum levels in excess of 6 inches of mercury
B. Interior cabin temperatures in excess of 90 deg.F.
C. Turning off the master switch while the gyros are turning in flight
D. Restarting the engine before the gyros have come fully to rest

29) Which of the following are true of the Cherokee fuel system?
A. If the primer is not locked, excessive fuel may flow to one or more cylinders, resulting in rough running at low speeds
B. The fuel tank selector valve cannot shut off fuel flow to the engine unless the mixture control is in the idle cutoff position
C. For takeoff, the engine-driven fuel pump is automatically retarded and the electric fuel pump is relied upon to provide a consistent fuel flow at high engine rpms.
D. A branch of the main fuel line to the carburetor flows to the fuel pressure gauge in the cabin.
E. The fuel strainer on the lower left front of the fire wall drains directly from both tanks bypassing the fuel tank selector valve

30) If over-priming may have flooded the engine, the recommended start procedure is:
A. Close the throttle fully, move the mixture to idle cutoff, leave the electric fuel pump off and crank. When the engine fires, advance the throttle one-half inch and advance the mixture.
B. Open the throttle fully, move the mixture to idle cutoff, leave the electric fuel pump off and crank. When the engine fires, advance the mixture and retard the throttle.
C. Open the throttle fully, move the mixture to idle cutoff, turn the electric fuel pump on and crank. When the engine fires, advance the mixture and retard the throttle.
D. Open the throttle approximately one-half inch, move the mixture to full rich, turn the electric fuel pump off and crank. When the engine fires, turn off the electric fuel pump and set the throttle for 1000 rpm.

31) After landing and refueling, the recommended procedure for restarting the Cherokee when the engine is hot is
A. Open the throttle fully; turn off the electric fuel pump; move the mixture control lever to idle cutoff; engage the starter. When the engine fires advance the mixture and retard the throttle.
B. Open the throttle approximately one-half inch; turn on the electric fuel pump; move the mixture control lever to idle cut-off; engage the starter. When the engine fires advance the mixture and move the throttle to the desired setting.
C. Open the throttle approximately one-half inch; turn off the electric fuel pump; move the mixture control lever to full rich; engage the starter. When the engine fires move the throttle to desired setting.
D. Open the throttle approximately one-half inch; turn on the electric fuel pump; move the mixture control lever to full rich; engage the starter. When the engine fires move the throttle to the desired setting.

32) When starting the PA28-140/160 aircraft
A. The POH recommends always priming the engine before starting unless it has recently been operated and remains hot.
B. Rapidly advancing and retarding the throttle several times before cranking effectively uses the accelerator pump to move fuel through the primer lines to the cylinders.
C. Engine fires are usually the result of over-priming.
D. If a fire develops while starting, continue to turn the engine with the starter or continue to operate the engine if started to draw fuel and fire into the induction system and the engine.
E. Do not crank the engine continuously for more than five or ten seconds if it fails to start. The prime is likely to be not correct.

33) If you discover pink aviation fuel in the tanks of the PA-28-140/160, you should
A. Refuel with the same type of fuel if possible
B. Refuel only with light blue aviation fuel
C. Not fly the aircraft until the fuel has been drained and replaced
D. Fly the aircraft, but closely monitor engine temperatures

34) Prolonged slips or skids which result in an altitude loss in excess of 2000 feet or other radical or extreme maneuvers should be avoided because:
A. The Cherokee is not certified for prolonged slips or skids
B. Fuel flow interruption may occur when the tank being used is not full
C. The airframe may be damaged by exposure to the asymmetrical stresses of prolonged slips or skids
D. The battery electrolytes could be damaged by a prolonged tilt