Pilot’s Name

Medical Class Medical Date

Certificate number Class

Ratings

Flying time: total last 90 days

Aircraft: Piper Archer II, PA28-181,

Aircraft Manual: Piper Cherokee Archer II Information Manual

Handbook Part No. 761 619

Note: This is an open-book quiz. All pilots must have their own “Information Manual” covering the specific aircraft being checked out in. Some questions are based on information in the Manual or the applicable POH of the aircraft. However, some of the questions will require other sources information that the pilot will have to reference or be knowledgeable in. For answers requiring numbers, please use the units corresponding to the units used on the specific aircraft’s flight instrument unless otherwise indicated.

* Tire inflation: mains: psi; nose: psi.
* How do you tell that the struts are properly inflated?
* The engine is make: model:

Rated atHP, atrpm, at sea level.

* Usable fuel grades include octane, color & octane, color.
* The two fue1 tanks have provisions for full or partial filling of: Gallons each tank (full) usable

Gallons to tab , usable

* Oil capacity is: quarts, minimum; fill to qts.
* Maximum gross weight pounds; useful load pounds.
* Maximum baggage compartment weight is pounds.
* Flaps: First notch degrees; Second notch degrees;

Third notch degrees

* Enter the following speeds (indicate mph or knots):

Take off rotation speed

Vy Best Rate of Climb

Vx best Angle of Climb

Cruise Climb

Va Maneuvering Speed

Pattern Approach Speed

Final Approach Speed with Flaps

Max Demonstrated X-Wind

Vfe Max Flaps Extended speed

Vne Never Exceed speed

Vno Max structural cruising

Vs Stall speed clean

Vso Stall in landing configuration

Best glide speed

* When is the electric fuel pump used? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* What are the steps for proper use of the EGT for leaning? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Flaps up land1nqs will increase landing distance by \_\_\_\_\_\_\_\_\_\_\_\_\_
* Can this plane safely take-off on a 2200 ft runway, at full gross weight on a 95 degree day with no wind? \_\_\_\_\_\_\_\_\_\_\_
* Cruising at 75% power at 5500 ft corresponds to \_\_\_\_\_\_\_\_\_\_\_ tas or \_\_\_\_\_\_\_\_\_\_\_ias & \_\_\_\_\_\_\_\_\_\_\_ rpm consuming \_\_\_\_\_\_\_\_\_\_\_gph.
* The electrical system is a \_\_\_\_\_\_\_\_\_\_\_volt system.
* The alternator is rated at \_\_\_\_\_\_\_\_\_\_\_ amps.
* The battery is rated at \_\_\_\_\_\_\_\_\_\_\_ ampere-hours.
* The pitot heat should be used in the following conditions:
* What is the after-takeoff checklist (in order)?
* Suppose the front seat occupants weight 390 lbs total, the back seat occupants weigh 340 lbs total, and there is 35 lbs. of luggage total. How much fuel can be carried?

* Emergency Airspeeds:

Best glide speed? \_\_\_\_\_\_\_\_\_\_\_

Expeditious Descent? \_\_\_\_\_\_\_\_\_\_\_

Emergency Landing Approach? \_\_\_\_\_\_\_\_\_\_\_

* The most probable cause of engine failure is? \_\_\_\_\_\_\_\_\_\_\_
* Cabin air is turned off by: \_\_\_\_\_\_\_\_\_\_\_
* Engine failure during take-off ground roll: \_\_\_\_\_\_\_\_\_\_\_
* Engine failure in flight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Power off landing: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Engine Roughness: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* In flight engine restart: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

* Engine fire in flight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Electrical fire in flight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

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

* The Glide ratio is \_\_\_\_\_\_\_\_\_\_to 1.
* Alternator failure: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

33.) Unlatched Door in flight: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Spin Recovery: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

35.) List below your personal minimums for flight and discuss them with your instructor. These minimums should include the items below but may also include additional parameters for flight.

Ceiling & Visibility ,

Surface Winds & Crosswind ,

Winds Aloft & Temperature ,

Current Weather & Forecast

CROSS COUNTRY PLANNING - VFR

The remaining questions are based on the following takeoff and cross country scenario: Pilot: 200 lbs.; Copilot: 200 lbs.

Passenger #1: 170 lbs.; Passenger #2: 170 lbs.; Baggage: 50 lbs.

Wind: Calm at 70N surface. Surface Temperature at Departure Airport: 80 F. Altimeter setting: 29.92. Forecast Winds enroute: 3K – 20Kts at 060, 6K – 30Kts at 060, 9Kft – 40Kts at 060. Departing from: Finger Lakes Rgnl. Airport (0G7) / Seneca Falls NY. Destination: Nantucket (ACK); Cruise Power: 65%

Mission requirement: Develop a VFR flight plan that will accomplish the cross country mission taking into account all applicable performance and regulations.

37.) Optimum amount of fuel on board: \_\_\_\_\_\_\_\_ gal.

38.) Flap setting at takeoff: \_\_\_\_\_\_\_\_ notch.

39.) Expected takeoff ground roll: \_\_\_\_\_\_ feet, at which point you should have an airspeed of at least \_\_\_\_\_\_ ias.

40.) Procedure in case you have not achieved that speed by that point:

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

41.) Approximate margin for error in that case: \_\_\_\_\_\_\_ feet of runway length, which corresponds to \_\_\_\_\_\_ seconds of reaction time.

42.) In the case where you do get proper takeoff performance, the distance required to clear a 50-foot obstacle is: \_\_\_\_\_\_ feet.

Other review items:

\_\_\_\_ Knowledge Of Pilot's Handbook

\_\_\_\_ Knowledge Of Operating Limitations

\_\_\_\_ Knowledge Of Fuel, Electrical, And Hydraulic Systems

\_\_\_\_ Knowledge Of Weight And Balance Computations

\_\_\_\_ Knowledge Of Aircraft Emergency Procedures

\_\_\_\_ Knowledge Of Radio Equipment

Reviewed by:

Instructor

Date