Hanscom Flight Training Center
Student Pre-Solo Written Test – Warrior PA28 - 161

In answering the following multiple choice questions, use the standard multiple choice answer sheets available with the test book. To answer questions where a narrative response is called for, use any appropriate sheet of paper. Indicate the question number being answered and attach it to the multiple choice answer sheet.

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1. What aircraft documents must be on board when flying solo?

_____
_____
_____
_____

2. What is the minimum safe altitude when flying over a congested area?
   (A) 1,000' above the highest obstacle; within a radius of 1,000'
   (B) 1,000' above the highest obstacle; within a radius of 2,000'
   (C) 2,000' above the highest obstacle; within a radius of 2,000'
   (D) none of the above

3. If departing an airport where an altimeter setting is not available, you should set the altimeter to:
   (A) altimeter setting of closest available airport where a setting is available
   (B) altimeter setting of most recent known barometer setting
   (C) elevation of departing airport
   (D) all of the above

4. When is a go-around appropriate?

_____
_____
_____
_____

5. If experiencing an engine failure on the takeoff:
   (A) land if remaining runway length permits
   (B) proceed straight ahead if insufficient altitude for a return and slow to minimum controllable airspeed for an off field landing
   (C) proceed straight ahead if there is an insufficient altitude for a return, then when an off field landing site is selected (if one is available), extend flags to 40°, maintain 63 kts and prepare for an off field landing
   (D) A or C as circumstances warrant

6. If proposing a solo day VFR flight and the landing light and the directional gyro are both inoperative:
   (A) the flight may be made
   (B) the flight may not be made
   (C) the pilot may cancel as he or she may decide
   (D) the flight may not be made without a flight instructor endorsement in the student logbook
   (E) both A and C

7. Best glide speed in a PA 28-161 is:
   (A) 44 kts with a 40° flap setting
   (B) 63 kts with a 40° flap setting
   (C) 73 kts with a 40° flap setting
   (D) 73 kts with flaps retracted

8. Maximum flap extension speed is:
   (A) 103 kts
   (B) shown as a △ on the airspeed indicator
   (C) 90 kts
   (D) both A and B

9. Maneuvering speed (V_A) is:
   (A) rough air speed
   (B) the speed above which a full and sudden deflection of the flight controls may cause aircraft structural damage
   (C) shown on the airspeed indicator as a ▲
   (D) none of the above

10. Total useable fuel in a Warrior is:
    (A) 48 gallons fully fueled
    (B) 34 gallons if fueled to the filler neck indicators
    (C) 50 gallons if fully fueled
    (D) both A and C

11. Automotive 93 octane fuel:
    (A) may be mixed 50/50% with aviation 100 LL on a one time only basis
    (B) may be used on a 25/75% basis in an emergency one time basis
    (C) may not be used
    (D) none of the above

12. 100 LL fuel is:
    (A) blue in color
    (B) green in color
    (C) magenta in color
    (D) none of the above

13. If a fuel sample is clear what action should a pilot take:

    _____
    _____
    _____
    _____

14. What is the pattern altitude at Hanscom Field?
    (A) 1,100'
    (B) 1,132'
    (C) 1,200'
    (D) 1,250'

15. What actions should you take if experiencing radio failure approaching Hanscom Field?

    _____
    _____
    _____
    _____

16. Describe pattern entry at a non-towered field.

    _____
    _____
    _____
    _____
    _____
    _____
    _____
    _____

17. What is the requirement for entry into the Bedford class D airspace?
    (A) a clearance is required
    (B) communication with the tower must be established
    (C) a clearance is required and identification of immediately preceding aircraft must be acknowledged
    (D) more information is needed

18. If lost, describe what actions you will take:

_____
_____
_____
_____

19. Hanscom Field is on the :
    (A) 223 R from the Lawrence VOR
    (B) 111 R from the Gardner VOR
    (C) 050 R from the Putnam VOR
    (D) all of the above

20. What is the approximate magnetic heading from Hanscom Field to Lawrence Field?
    (A) 053°
    (B) 223°
    (C) more information is needed
    (D) if C, then what information is needed:

_____
_____
_____

21. With reference to the Avidyne GPS, describe the steps to proceed from your present position to another point such as an airport.

_____
_____
_____
_____

Annual Reviews

Date _____   (CFI) _____

Date _____   (CFI) _____

Date _____   (CFI) _____

Date _____   (CFI) _____