

Pre-Solo Written Exam

Student Name: _____ Date: _____

Aircraft Make & Model: _____ Instructor: _____

Aircraft

1.) What is the total fuel capacity of the aircraft? _____ Gallons total

2.) How many gallons of fuel are unusable?

3.) What color is this fuel? _____

4.) How can you determine if there is water in the fuel?

5.) Where are the fuel sumps located on the aircraft?

6.) Where is the fuel vent located, and what is its purpose?

7.) What are the maximum and minimum oil capacities? ____ quarts Max. ____ quarts Min

8.) What are the following speeds and their associated values for your aircraft?

A. Vne: _____ / _____ kts

B. Vfe: _____ / _____ kts

C. Va: _____ / _____ kts

D. Vx: _____ / _____ kts

E. Vy: _____ / _____ kts

F. Vs: _____ / _____ kts

G. Vso: _____ / _____ kts

9.) What is best glide speed? What speed is it in your aircraft?

10.) What do you do if your engine fails?

11.) What is the procedure for an engine fire:

Inflight: _____

On the ground during start: _____

12.) Given the following conditions, what is the headwind and crosswind component for a takeoff on runway 14? _____ kts headwind _____ kts crosswind

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13.) What is your aircraft's maximum crosswind component? _____ kts

14.) What happens to the aircraft stall speed in a 60-degree bank?

15.) What must be done to recover from a stall?

16.) What are the steps to recover from a spin?

17.) Describe a "side slip"

18.) Describe a “forward slip”

19.) What is density altitude

20.) When do we use carburetor heat? What is an indication of carburetor icing?

Regulations

21.) What personal documents and endorsements are you required to have before you fly solo? (FAR 61.87)

22.) When must seatbelts and shoulder harnesses be worn? (FAR 91.105 & 91.107)

23.) When are you allowed to deviate from an ATC clearance or instruction?

24.) After consuming alcohol, how many hours must have passed since your last drink, and what must your blood alcohol content be below? (FAR 91.17)

25.) Can student pilots carry passengers? Yes / No (FAR 61.89)

26.) Can student pilots fly for compensation or hire? Yes / No (FAR 61.89)

27.) What is the minimum fuel reserve required for a day VFR flight, and on what cruise speed is this reserve based on? (FAR 91.151)

28.) Except when taking off or landing, what are the minimum safe altitudes over congested areas? _____ feet Uncongested areas? _____ feet (FAR 91.119)

29.) If the current local altimeter setting is not available, what setting should you use before departing? (FAR 91.121)

30.) What documents must be in the aircraft for it to be considered airworthy? (FAR 91.203)

General

31.) What is the traffic pattern altitude at KLWM? _____ MSL

32.) What direction is a standard traffic pattern? _____

33.) What are the standard dimensions of a Class D airport and what are the entry requirements?

34.) What are the basic VFR day weather minimums to fly in class C, D and E airspace?

35.) Can a student pilot fly in or through Class B airspace on a solo flight?

36.) Do we need a transponder to depart and arrive at KLWM? Explain your answer.

37.) The air traffic controller clears you or the option, what are you able to do with this clearance?

WIND COMPONENT

