

## GACE FLYING CLUB CESSNA 172 AIRPLANE REVIEW – 2009

DATE: \_\_\_\_\_ AIRPLANE NUMBER: \_\_\_\_\_

NAME: \_\_\_\_\_ GACE#: \_\_\_\_\_ SCORE: \_\_\_\_\_

CHECKED BY: \_\_\_\_\_ CFI#: \_\_\_\_\_ DATE: \_\_\_\_\_

*Information for answers may be found in Cessna 172 manual and passing grade is 80%. Use the back of this form for additional calculations. Include a reference page for each answer.*

1. What is the Maximum allowable weight in the rear seats, when operating in the utility category?
2. In which Position should the fuel selector be placed during fueling?
3. What is the Maximum allowable weight in baggage area 2?
4. What is (are) the Color(s) of the Approved fuel(s)?
5. How much Unusable fuel is there in each tank?
6. What is the Minimum allowable oil pressure?
7. What Color on the airspeed indicator denotes the flap operating range?
8. What is the Maximum allowable AFT CG in utility category?
9. What is the Maximum allowable weight in utility category?
10. What is the Maximum allowable oil temperature?
11. What is the first action to be taken if the Low Voltage light illuminates in flight?

12. What is the first action to be taken if there is an Engine Fire in flight?
13. What is the best glide speed after engine failure in flight?
14. What action should be taken, if during flight, the oil pressure is low and the oil temperature is rising?
15. How is carburetor ice detected?
16. What is the maximum approved flap setting for takeoff? (4-14)
17. What is the maximum RPM difference between magnetos allowed during engine runup?
18. What flap setting should be used for a soft field takeoff?
19. What is the procedure for leaning the engine?
20. What airspeed should be achieved before retracting flaps during a balked landing?
21. May the airplane be flown if the fuel gage is inoperative?
22. How many fuel drains are on the airplane? (7-23)
23. Which glass cleaner may be used to clean the windshield?
24. What is the capacity of the alternator in amperes?
25. What is the voltage rating of the battery?
26. What is VA (KIAS) at 2300 pounds?
27. What is VFE (KIAS) at 40 degrees flaps?

28. How far will the airplane glide from 2500 feet into a 20-knot headwind?
29. What is VY (KIAS) at 3000 feet?
30. What is VX (KIAS) at 3000 feet?
31. What is normal climb speed (KIAS) at 3000 feet?

Use the following conditions for the remaining questions, unless otherwise indicated, use the actual aircraft Empty Weight and Moment.

|                       |                              |                       |
|-----------------------|------------------------------|-----------------------|
| Weight(s):            | Empty Weight                 | 1479 lbs              |
|                       | Front seats                  | 330 lbs               |
|                       | Rear seats                   | 230 lbs               |
|                       | Baggage area 1               | 60 lbs                |
|                       | Baggage area 2               | 50 lbs                |
| Weather:              | Pressure Altitude at Takeoff | 2000 feet             |
|                       | Pressure Altitude at Cruise  | 4000 feet             |
|                       | Temperature Standard         | + 20C (all altitudes) |
| Cruise Power Setting: | 65%, Wind = 0                |                       |

32. What is the maximum fuel that can be loaded?
33. What is the CG location for flight? Is it within acceptable limits?
34. What is the endurance for Night VFR flight?
35. What is the range for Night VFR flight?

**For questions 36 thru 40 - Takeoff and Landing weight of 2300 pounds for short field operations:**

36. What is the takeoff ground roll?
37. What is the total takeoff distance to clear a 100 ft obstacle?
38. What is the landing ground roll?

39. What is the total landing distance to clear a 100 ft obstacle?

40. Estimate the minimum runway length if the engine quits at liftoff speed (use (3) second decision time).