

References: 1997 Model 172R, 1977 and 1979 Model 172N, and 1968 Model 172I.
Pilot's Operating Handbooks with applicable STC supplements, and RAFA SOP, May 2000.

CESSNA 172R, N9791F

1. What is the normal category maximum takeoff weight?
 - a. 2300 lbs
 - b. 2150 lbs
 - c. 2550bs
 - d. 2747 lbs

2. The total fuel capacity in this aircraft is ____gallons, with ____gallons usable, but should only be filled to the filler necks (35 gallons) upon returning to the RAFA ramp for parking.
 - a. 56/53 gal
 - b. 40/39 gal
 - c. 53/56 gal
 - d. 62/58 gal

3. Because of the baffling in the fuel cells and the engine's fuel injection system, 9791F has 13 fuel drains, ____ in each wing and ____ on the bottom of the forward fuselage.
 - a. 4/5
 - b. 5/3
 - c. 6/1
 - d. 2/9

4. The POH takeoff procedures says to start rotating the nose at 55 kts and climb out at 75-85 kts for a normal take-off. The POH lists V_x as ____kts and V_y as ____kts,
 - a. 62/ 74
 - b. 55/80
 - c. 65/75
 - d. 61/78

5. Maneuvering speed (V_A) at 2550 pounds is:
 - a. 104 KIAS
 - b. 100 KIAS
 - c. 102 KIAS
 - d. 105 KIAS

6. Using the cold start procedure of this fuel injected aircraft requires the auxiliary fuel pump to be ____ when priming and ____ when starting.
 - a. ON/OFF
 - b. ON/ON
 - c. OFF/ON
 - d. OFF/OFF

7. What is V_{SO} (stall speed at max gross weight and full flaps) in level flight?
 - a. 35 KIAS
 - b. 22 KIAS
 - c. 44 KIAS
 - d. 40 KIAS

POH Pg Ref

8. Determine the cruise performance at max gross weight, 4000 feet pressure altitude, standard temperature, leaned mixture, and 73% power. The throttle setting would be ____RPM yielding an airspeed of ____KTAS, while burning ____ GPH.
- a. 2550 / 117 / 9.9 b. 2450 / 122 / 8.0
c. 2500 / 120 / 9.1 d. 2625 / 118 / 8.6
9. Should the air induction filter become blocked in flight (from ice or debris), an alternate air source is available _____, which results in a power loss of approximately ____%.
- a. manually / 10 c. automatically / 10
b. manually / 15 d. automatically / 15

CESSNA 172N, N2108E, N5697E

10. What is the total usable fuel capacity for N2108E and N5697E ?
- a. 38/62 gal b. 40/49 gal c. 37/42 gal d. 43/53 gal
11. The indicated zero-bank stall speeds at max gross weight and forward CG with / without flaps are:
- a. 44 KIAS / 33 KIAS c. 55 KIAS / 35 KIAS
b. 41 KIAS / 47 KIAS d. 40 KIAS / 30 KIAS
12. Referring to the Equipment List in the Weight and Balance Section 6 of the POH, which item of equipment is required ?
- a. Mirror, rear view c. Map light, control wheel mounted
b. Indicator, rate of climb d. Propeller spinner
13. Final approach airspeeds (KIAS) with flaps up and down are:
- a. 50-60 / 65-70 b. 55-65 / 60-70 c. 60-70 / 55-65 d. 65-75 / 60-70

14. What is maneuvering speed (V_A) at 2300 pounds and 1600 pounds, respectively?

- a. Remains constant
- b. 80 & 97 KIAS
- c. Varies with CG location
- d. 97 & 80 KIAS

15. Is N2108E approved for intentional spins?

- a. No
- b. Yes

16. Determine the weight and balance given the following information:

<u>Item</u>	<u>Weight</u>	<u>Arm</u>	<u>Moment</u>
Basic Aircraft	1490.5		58008.7
Fuel (40 gal)	<u>240.0</u>	47.9	<u>11496</u>
Pilot & passenger	330	<u>37.0</u>	<u>12210</u>
2 rear passengers	150	<u>73.0</u>	<u>10950</u>
Baggage area 1	60	<u>95.0</u>	<u>5700</u>
<u>Totals:</u>	<u>2270.5</u>		<u>98364.7</u>

CG = 43.32

- a. Over weight limits, within CG
- b. Within weight limits, outside aft CG
- c. Within weight limits, within CG
- d. Within weight limits, outside forward CG

CESSNA 172I, N35553

17. The minimum oil level is:

- a. 10 qts
- b. 4 qts
- c. 5 qts
- d. 6 qts

18. A short-field (maximum performance) takeoff is performed at:

- a. 0° flaps, rotate @ 68 mph, maintain until clear of obstacle
- b. 10° flaps, rotate @ 75 mph
- c. full flaps, rotate @ 47 mph
- d. not applicable

19. Maximum flap-extension speed (V_{FE}) is:

- a. 82 MPH
- b. 123 MPH
- c. 100 MPH
- d. 111 MPH

20. Final approach airspeeds (MPH) with flaps up and down are:
- a. 50-60 / 65-70
 - b. 60-70 / 55-65
 - c. 55-65 / 60-70
 - d. 70-80 / 65-75
21. Use the performance charts for the range profile to determine the range in SM at 2300 lbs, standard conditions, with full fuel, using 75% power at 5000 feet PA, no reserve.
- a. 600 SM
 - b. 485 SM
 - c. 1257 SM
 - d. 625 SM
22. What is the ground roll and total takeoff distance required to clear a 50-foot obstacle at maximum gross weight, 0° flaps, temperature 50°F, dry grass runway, pressure altitude (PA) 2500 ft and no wind?
- a. 1173/2044 ft
 - b. 600 /1350 ft
 - c. 1144/2101 ft
 - d. 865/1525 ft
23. The best rate of climb (V_Y) and the best angle of climb (V_X) speeds @ sea level are:
- a. 82 / 68 MPH
 - b. 90 / 75 MPH
 - c. 80 / 70 MPH
 - d. 85 / 73 MPH
24. What is the best glide speed for N35553?
- a. 95 MPH
 - b. 75 MPH
 - c. 85 MPH
 - d. 80 MPH
25. Is N35553 approved for intentional spins?
- a. No
 - b. Yes

Common to more than one model

26. When returning to RAFA, the C-172I and C-172N fuel tanks should be filled to:
- a. do not fill
 - b. bottom of filler neck
 - c. 37 gallons
 - d. full capacity (topped off)

27. The electrical systems for the C-172R and the C-172N consist of a:

- a. 110 volt system w/400 Hz inverters
- b. 28 volt system, 24 volt battery
- c. 14 volt system, 12 volt battery
- d. 28 volt system, 12 volt battery

28. The hydraulic reservoirs for the brakes on a C-172 are located:

- a. behind the pilot rudder/brake pedals
- b. in the tail section
- c. adjacent to the aircraft's battery
- d. on the forward firewall

29. How does temperature above standard affect true airspeed & fuel consumption at a constant RPM ?

- a. They do not change
- b. Both decrease slightly
- c. Both increase dramatically
- d. Only affects turbine powered aircraft

30. What are the maximum horsepower ratings for the C-172R, C-172N, and C-172I, respectively?

- a. 150, 140, 130
- b. 185, 165, 155
- c. 160 for each model
- d. 180, 160, 150

31. The maximum demonstrated crosswind component for the C-172 is:

- a. 13 kts
- b. 15 kts
- c. 11 kts
- d. no limits

32. What is the best glide speed for the R and N models?

- a. 68 KIAS & 65 KIAS
- b. 60 KIAS & 65 KIAS
- c. 80 MPH & 85 MPH
- d. 75 KIAS

33. What is the maximum gross weight for utility category operations in the R and N models?

- a. 2000/2000
- b. 2500/2300
- c. 2200/2000
- d. 2300/2200