

## CESSNA 172SP Part I

- 1) What is the total usable fuel capacity?
  - a) 56 gal
  - b) 53 gal
  - c) 56 gal
  - d) 28 gal
  
- 2) The fuel selector may be in which of the following positions for landing?
  - a) left
  - b) right
  - c) both
  - d) all of the above
  
- 3) If the LOW FUEL R annunciator illuminated (other than during self test), this is an indication there is less than approximately \_\_\_\_ gallons of fuel remaining in the \_\_\_\_ tank.
  - a) 5/ the right
  - b) 5/ the left
  - c) 10/ either
  - d) all of the above
  
- 4) Buss voltage will be approximately \_\_\_\_ volts when operating with the standard 12.75AH battery only, and \_\_\_\_ volts when operating with the 60-amp alternator.
  - a) 12.0, 14.0
  - b) 1.5, 28.5
  - c) 24.0, 28.0
  - d) 24.0, 24.5
  
- 5) The maximum weight allowed in baggage area 1 is 120 lbs. The maximum weight allowed in baggage area 2 is
  - a) 120 lbs
  - b) Limited only by gross weight & c.g. considerations
  - c) 50 lbs for a total baggage capacity of 170 lbs
  - d) 50 lbs, but the total for areas 1 & 2 is limited to 120 lbs
  
- 6) If induction air system blockage occurs, the pilot should:
  - a) pull the static pressure alternate source valve and carefully monitor engine RPM and EGT
  - b) expect a 10% loss of power as induction air is drawn through the spring loaded alternate air door
  - c) manually open the alternate air door and apply carburetor heat immediately
  - d) Land immediately and have a qualified maintenance technician replace the induction air filter.

- 7) The aircraft has been serviced with SAE 50W oil. During a cross country you need to add oil, which of the following is acceptable?
- a) SAE 50W
  - b) SAE 15W-50
  - c) SAE 20W-50
  - d) all of the above
- 8) The recommended starter duty cycle is 10 seconds, followed by a 20 second cool down period. This cycle can be repeated \_\_\_\_ additional times but then the starter must be allowed to cool for \_\_\_\_minutes.
- a) 2, 10
  - b) 3, 10
  - c) 2, 20
  - d) 2, 5
- 9) Intentional stalls may be performed only if the aircraft is in the utility category. The utility category means
- a) the rear seat is unoccupied
  - b) the baggage compartment is empty
  - c) the gross weight is less than 2200 lbs
  - d) all of the above

You are planning a trip with three people. The aircraft is fully fueled. The pilot weighs 210 lbs. and sits with the seat pin engaged in the very last (AFT) hole. The passenger in the front seat weighs 150 lbs. and sits with the seat engaged in the very first (Forward) hole. The rear seat passenger weighs 100 lbs and is sitting behind the pilot.

Aircraft empty weight: 1673.0 lbs. Arm: 39.5652 Moment: 66,192.6

- 10) What is the aircraft weight?
- a) 2451
  - b) 2500
  - c) 2445
  - d) 2341
- 11) What is the aircraft moment?
- a) 102.5
  - b) 104.5
  - c) 103.5
  - d) 120.4
- 12) Is this loading approved for flight?
- a) Yes, in the normal category but not utility category
  - b) Yes, in both the normal category and utility category
  - c) no, it is out of the permissible range for c.g.
  - d) no, it over the maximum allowable gross weight

Given the following condition  
OAT: 10 C  
Field elevation: 3000  
Gross weight: 2550 lbs  
Wind: light and variable  
Fuel: Full  
Speed fairings: Removed  
Cruise altitude: 8000' MSL

- 13) What is the depicted short field takeoff distance to clear a 50' obstacle?
- a) 2280
  - b) 2180
  - c) 2080
  - d) 1980
- 14) If you returned to the airport immediately, and executed a short field landing, what would the depicted landing distance over a 50' obstacle be?
- a) 1325
  - b) 1430
  - c) 1375
  - d) 1425
- 15) Assuming a standard temp at 8000' MSL and a RPM setting of 2300, what will be your fuel burn per hour?
- a) 10.4
  - b) 7.5
  - c) 7.1
  - d) none of the above
- 16) Which of the following most accurately represents the glide range of the C-172S?
- a) 550'/nm
  - b) 670'/nm
  - c) 1200'/nm
  - d) 970'/nm
- 17) In the C172S there is an auxillary fuel pump in the aircraft. When should the auxillary fuel pump be used?
- a) To assist in priming the engine for start.
  - b) During hot starts.
  - c) In the event of the engine driven pump failing.
  - d) All of the above.
- 18) The maximum demonstrated crosswind for the C172S is?
- a) 13 knots
  - b) 15 knots
  - c) 17 knots
  - d) 20 knots

- 19) The proper leaning procedure for ground operations is:
- a) full rich only to prevent engine damage
  - b) rotate mixture control until approximately "2 fingers" lean of full rich
  - c) for maximum RPM at approximately 1200 RPM
  - d) for maximum RPM at approximately 1800 RPM
- 20) The proper leaning procedure prior to takeoff is:
- a) full rich only to prevent engine damage
  - b) rotate mixture control until approximately "2 fingers" lean of full rich
  - c) for maximum RPM at approximately 1800 RPM when DA exceeds 3000'
  - d) for maximum RPM at full throttle when DA exceeds 3000'