

PILOT \_\_\_\_\_

INSTRUCTOR \_\_\_\_\_

DATE \_\_\_\_\_

**Cessna 172S 6-Month Quiz Tail: N435SP**

1. Date of current aircraft weight and balance computations \_\_\_\_\_
2. Aircraft empty weight: \_\_\_\_\_ lbs.
3. Maximum normal category takeoff gross weight: \_\_\_\_\_ lbs.  
Normal category Useful Load: \_\_\_\_\_ lbs.
4. Maximum utility category takeoff gross weight: \_\_\_\_\_ lbs.  
Utility category Useful Load: \_\_\_\_\_ lbs.
5. Full fuel usable quantity: \_\_\_\_\_ gal.  
Usable fuel at bottom edge of fuel filler tab: \_\_\_\_\_ gal.
6. Maximum passenger and baggage weight with full fuel: \_\_\_\_\_ lbs.  
Maximum passenger and baggage weight at fuel filler tab: \_\_\_\_\_ lbs.
7. Tire pressures are \_\_\_\_ psi for the nose tire and \_\_\_\_ for the main tires.
8. Minimum oil quantity is \_\_\_\_ qts. System oil capacity is \_\_\_\_ qts.  
For local training flights, oil would not be added above \_\_\_\_ qts.
9. How many fuel system drains should be sampled during preflight? \_\_\_\_\_  
Where are these fuel system drains located? \_\_\_\_\_.
10. What data applies for engine start, runup, taxi, and climb to 6,000' on a day 10°C above standard?  
\_\_\_\_\_ Gallons  
\_\_\_\_\_ Minutes  
\_\_\_\_\_ Nautical miles
11. Assume cruising at 6000' on a standard day at 65% BHP, the POH indicates:  
\_\_\_\_\_ RPM  
\_\_\_\_\_ KTAS  
\_\_\_\_\_ GPH
12. Assuming takeoff conditions in question 10 and cruise conditions in question 11, with fuel at the fuel filler tab and maximum passenger and baggage weight at takeoff, and allowing 10 gallons in the tanks at landing for reserve, the maximum range of the aircraft with a 20 knot headwind is \_\_\_\_\_ nautical miles.

13. What are the values for the following (indicated) airspeeds?
- |                 |       |                       |
|-----------------|-------|-----------------------|
| V <sub>so</sub> | _____ |                       |
| V <sub>s</sub>  | _____ |                       |
| V <sub>x</sub>  | _____ |                       |
| V <sub>y</sub>  | _____ |                       |
| V <sub>a</sub>  | _____ | (at 2,200 lbs)        |
| V <sub>no</sub> | _____ |                       |
| V <sub>ne</sub> | _____ |                       |
| Takeoff rotate  | _____ |                       |
| Enroute climb   | _____ |                       |
| Best glide      | _____ | (at max gross weight) |
| Go around       | _____ | at Flaps _____°       |
14. What is the maximum airspeed at which Flap 10° can be extended? \_\_\_\_\_ knots.  
 What is the maximum airspeed at which more than Flap 10° can be extended? \_\_\_\_\_ knots.
15. What is the correct flap position for a Normal Takeoff? \_\_\_\_\_°.  
 What is the correct flap position for a Short Field Takeoff? \_\_\_\_\_°.  
 What is the correct flap position for a Soft Field Takeoff? \_\_\_\_\_°.
16. What is the maximum entry speed for performance of a Steep Turn? \_\_\_\_\_ knots.
17. What are the autopilot limitations specified in the FAA AFM supplement?
1. \_\_\_\_\_
  2. \_\_\_\_\_
  3. \_\_\_\_\_
  4. \_\_\_\_\_
18. What are two ways that the autopilot may be disengaged?
1. \_\_\_\_\_
  2. \_\_\_\_\_
19. What is the ground roll distance and the total distance required to clear a 50 foot obstacle on takeoff for the following conditions using the POH numbers: Runway 9; Pressure altitude 4000 feet; temperature 30°C; Wind 270 at 6 knots; maximum gross weight; hard runway?  
 \_\_\_\_\_ ground roll                      \_\_\_\_\_ to clear 50 foot obstacle
20. What is the ground roll distance and distance required to clear a 50 foot obstacle when landing for the following conditions using the POH numbers: Runway 9; grass; Pressure altitude 2000 feet; temperature 20°C; Wind 090 at 9 knots; maximum gross weight?  
 \_\_\_\_\_ ground roll                      \_\_\_\_\_ to clear 50 foot obstacle
21. In order to develop full power when above 3000 feet MSL, the mixture should be adjusted to “recommended lean”. What temperature on the EGT represents this mixture? \_\_\_\_\_