

PILOT _____

INSTRUCTOR _____

DATE _____

Cessna 172N (D2J Upgrade)

6-Month Quiz

Tail: 737WS

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.
6. Maximum passenger and baggage weight with full fuel: _____ 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 67% BHP, the POH indicates:
_____ RPM
_____ KTAS
_____ GPH
12. Assuming takeoff conditions in question 11 and cruise conditions in question 12, with full fuel 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_{so} _____
V_s _____
V_x _____

Vy _____
Va _____ (at 2,400 lbs)
Vno _____
Vne _____
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?
17. How do you set the barometric pressure on the Aspen Evolution unit?
18. How do you set the CRS arrow to a desired direction?
19. How do you connect the Aspen unit to the GPS unit?
20. How do you set "Auto Course Select" to "ON"? (this takes information from the activated GPS flight plan and automatically sets the HSI heading arrow)
21. What STC was used to install the O-320-D2J?
22. Where do you find the updated CG range with the D2J engine installed?
23. 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
24. 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

25. 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?