Cessna 172M

Normal Procedures Test

Rocky Mountain Flight Center

(Ref: Cessna 172M Pilot's Operating Handbook, FTC & SOP)

Please do not mark on booklet

1. Fuel capacity in U.S. Gallons

   a) 20 gal each tank
   b) 42 gal usable
   c) 43 gal total, 40 usable
   d) 42 gal total, 38 usable

2. Maximum certified weight(s) is/are: (make sure to note any changes in weights due to the 1999 refit with a 180 HP engine)

   a) Normal Category 2550 lbs
   b) Utility Category 2000 lbs
   c) Combined baggage areas 1 and 2, 120 lbs
   d) All choices

3. What are Va and Vno at maximum gross weight?

	Va	Vno
a)	105 KIAS	127 KIAS
b)	89 KIAS	128 KIAS
c)	80 KIAS	85 KIAS
d)	158 KIAS	86 KIAS

4. On preflight check of oil, you may not operate aircraft with less than _____ quarts of oil.

   a) 5 qts
   b) 6 qts
   c) 7 qts
   d) 8 qts

5. Normal takeoff airspeeds are:

   a) Lift nose wheel at 55 KIAS climb 70-80 KIAS
   b) En route climb 70-90 KIAS
   c) Lift nose wheel at 55 KIAS climb 59 KIAS
   d) Take off at or below white arc on airspeed indicator

6. Flap setting for normal and obstacle clearance takeoffs are:

	Normal	Obstacle
a)	10 degrees	0 degrees
b)	10 degrees	10 degrees
c)	0 degrees	0 degrees
d)	0 degrees	10 degrees

7. Final approach airspeeds, flaps, up and down are:

	Flaps Up	Flaps Down
a)	50-60 kts	65-75 kts
b)	65-75 kts	50-60 kts
c)	60-70 kts	55-65 kts
d)	66-65 kts	60-70 kts

8. After starting the aircraft, if the oil gauge does not begin to show pressure within _____ in the summertime and about _____ that long in very cold weather, stop the engine and investigate.

a)	60 seconds	30 seconds
b)	45 seconds	twice
c)	30 seconds	twice
d)	15 seconds	30 seconds

9. During a high altitude takeoff in hot weather, it is recommended that _____ flaps be used for takeoff.

   a) 0 degrees
   b) 10 degrees
   c) 20 degrees
   d) 30 degrees

10. With average pilot technique, direct crosswind landings of _____ knows can be handled with safety.

    a) 10 knots
    b) 12 knots
    c) 15 knots
    d) 18 knots

11. Caution, pumping the throttle may cause raw fuel to accumulate in the intake duct, crating a fire hazard in the event of a backfire.

    a) True
    b) False

12. Best glide speed with flaps up is:

    a) 65 KIAS
    b) 60 KIAS
    c) 63 KIAS
    d) 67 KIAS

13. The stall speed at max gross weight, forward CG, flaps up, 60 degrees bank is:

    a) 66 KIAS
    b) 75 KIAS
    c) 47 KIAS
    d) 59 KIAS

14. Takeoff distance weighting 2100 lbs., with pressure altitude of 6000 ft, and temperature of 30 degrees Celsius is: (due to the refit with 180 HP engine in 1999 the actual performance will be “equal to or greater than” that shown in the performance charts)

    a) Ground roll 1185'
    b) To clear 50 ft obstacle 2140'
    c) Ground roll 1080'
    d) To clear 50 ft obstacle 2435'

15. Rate of climb at 2300 lbs, with a pressure altitude of 8000', and a temperature of 20 degrees Celsius is: (due to the refit with 180 HP engine in 1999 the actual performance will be “equal to or greater than” that shown in the performance charts)

    a) 390 fpm
    b) 280 fpm
    c) 255 fpm
    d) 365 fpm

16. Compute approximate time, fuel, and distance to climb from the Colorado Springs airport to 9000 ft MSL: (due to the refit with 180 HP engine in 1999 the actual performance will be “equal to or greater than” that shown in the performance charts)

	Time	Fuel	Distance
a)	21 min	3.9 gal	28 NM
b)	12 min	2.3 gal	16 NM
c)	9 min	2.6 gal	13 NM
d)	9 min	2.7 gal	12 NM

17. Cruise performance (Airspeed & Fuel Flow) at 8000 ft MSL, 59% power,and 20 degrees Celsius above standard temperature is: (due to the refit with 180 HP engine in 1999 the actual performance will be “equal to or greater than” that shown in the performance charts)

	Airspeed	Fuel Flow
a)	110 kts	6.9 gph
b)	97 kts	15.2 gph
c)	105 kts	6.8 gph
d)	108 kts	7.6 gph

18. Cruising Range Calculations: Fuel consumption range / endurance information originally presented in the Pilots Operating Handbook (POH) do not apply after the refit in 1999 with a 180 HP engine. However, using the (POH) charts as a very optimistic reference, calculate range with a 45-minute reserve, starting with 38 gallons of usable fuel, at 10,000 ft pressure altitude, and at 45% power.

    a) 479 NM
    b) 485 NM
    c) 470 NM
    d) 460 NM

19. Landing distance at maximum gross weight, at 6000' pressure altitude, a temperature of 86 degrees Fahrenheit, and with 9 kts headwind is:

    a) Ground roll 616'
    b) To clear 50' obstacle 1535'
    c) To clear 50' obstacle 1381.5
    d) Ground roll 705'

20. What is the maximum flap setting (since the 1999 refit with a 180 HP engine)?

    a) 10 degrees
    b) 20 degrees
    c) 30 degrees
    d) 40 degrees