

USAF Academy Flight Training Center

Cessna 172 Aircraft Exam
September 2022

Instructions

Complete the following exam using the answer sheet provided. Do not assume information not specifically provided in the questions. You will need the Cessna 172 K, M, N, P, model Information Manuals and the Supplemental Type Certificate for Cessna 172 M and K models. Questions 1 - 25 are open book. The closed book exam (emergency procedures) will be on a separate answer sheet.

I. General

1. C-172K and M models with standard fuel tanks can hold ____ gallons of fuel. Total **usable** fuel is ____ gallons. Long-range tanks for these models can hold ____ gallons with a total usable fuel of ____ gallons.
 - a. 43, 40 and 52, 50
 - b. 42, 38 and 52, 48
 - c. 42, 38 and 54, 50
 - d. 42, 40 and 52, 54
2. C-172N and P models with standard fuel tanks can hold ____ gallons of fuel. Total usable fuel is ____ gallons. Long-range tanks for these models can hold ____ gallons with a total usable fuel of ____ gallons.
 - a. 42, 40 and 54, 50
 - b. 43, 40 and 52, 48
 - c. 43, 40 and 54, 50
 - d. 42, 44 and 54, 52

For Question 3 and 4 reference the appropriate aircraft's metal binder Supplemental Type Certificate and updated weight and balance information. Our Aircraft C172s have been upgraded to 180hp engines, which changes the aircraft weight and balance from the POH.

3. The maximum certified takeoff and landing weight for the C-172 M in the normal category is ____ lbs. In the utility category, it is ____ lbs.
 - a. 2550 / 2050
 - b. 2450 / 2050
 - c. 2300 / 2000
 - d. 2550 / 2000
4. The maximum certified takeoff and landing weight for the C-172 K in the normal category is ____ lbs. In the utility category, it is ____ lbs.
 - a. 2500 / 2000
 - b. 2400 / 2000
 - c. 2300 / 2000
 - d. 2500 / 2100

II. Limitations

5. The maximum flap extended speed (Vfe) for the C-172 M, N, & P is ____ and K is ____.
 - a. 85 kts / 100 kts
 - b. 85 kts / 100 mph
 - c. 85 mph / 100 mph
 - d. 90 kts / 105 mph
6. The maximum flap extended speed (Vfe) with flaps 10°-30° for the C-172P is ____ kts.
 - a. 110
 - b. 85
 - c. 95
 - d. 100
7. Never Exceed Speed (Vne) in the C-172 N is ____ kts, in the C-172P is ____ kts.
 - a. 128 / 158
 - b. 160 / 158
 - c. 160 / 127
 - d. 155 / 125
8. Maximum Structural Cruising Speed (Vno) in the C-172K is ____ mph, in the C-172P is ____ kts.
 - a. 128 / 158
 - b. 140 / 127
 - c. 160 / 127
 - d. 155 / 125
9. The demonstrated crosswind limit in C-172 aircraft is ____ kts.
 - a. 10
 - b. 15
 - c. 18
 - d. 20

III. Normal Procedures

10. After starting the engine, the oil gage should show pressure within ____ seconds in the summer and within ____ seconds in very cold weather.
 - a. 30 / 45
 - b. 30 / 60
 - c. 30 / 30
 - d. 60 / 90
11. The mixture in the C-172M/N/P should be leaned prior to takeoff from fields above ____ feet elevation. The C-172K mixture should be leaned at fields above ____ feet elevation.
 - a. 7500 / 6000
 - b. 6500 / 5500
 - c. 3000 / 5000
 - d. 2500 / 8500

12. In balked landing (go-around) climb, reduce the flap setting to ____ immediately after full power is applied.
- 0°
 - 20°
 - 30°
 - 10°
13. Flap settings greater than ____ are not approved for takeoff (except C-172 K).
- 10°
 - 20°
 - 30°
 - 40°
14. The stall warning horn sounds ____ kts above the stall in all configurations (except C-172 K).
- 5 - 10
 - 0 - 5
 - 5 - 7
 - 8
15. If you enter a spin, the following recovery should be used:
- 1) throttle - idle, ailerons - neutral
 - 2) apply and hold full rudder opposite to the direction of rotation
 - 3) Just **after** the rudder reaches the stop, move the control wheel briskly forward far enough to brake the stall
 - 4) **Hold** these control inputs until rotation stops
 - 5) As rotation stops, neutralize rudder, and make a smooth recovery from the resulting dive.
- True
 - False
16. The best glide speed in the C-172M, N, or P is ____ knots and for the C-172K is ____ mph.
- 70 / 82
 - 65 / 80
 - 60 / 69
 - 60 / 75

IV. Performance

17. The true airspeed (TAS) in Colorado is always ____ than the indicated airspeed (IAS).
- Lower
 - Higher
 - No different
18. To climb from the academy airfield to 9,500 feet MSL in a C-172 P would take ____ minutes, with ____ gallons of fuel used, and distance of ____ NM traveled. **Note:** *Don't add fuel for taxi.*
- 10 / 1.5 / 11
 - 9.5 / 1.5 / 13
 - 8.0 / 1.8 / 12
 - 7.5 / 2.5 / 14

V. Airplane Systems

19. The engine in the C-172 has ____ spark plug(s) in each cylinder and ____ engine driven magneto(s).
- 1, 1
 - 1, 2
 - 2, 2
 - 2, 1
20. Fuel flows by ____ from the two wing tanks to a four-position selector valve in the C-172K/M/N/P.
- Gravity
 - an electric pump
 - a hydraulic pump
 - an aneroid mixture valve
21. The C172 braking system has a single-disc, hydraulically-actuated brake on each main landing gear wheel. Each brake is connected by a hydraulic line to a master cylinder attached to each of the pilot's rudder pedals.
- True
 - False
22. The C-172P model with:
Standard fuel tanks can hold ____ U.S. gallons of fuel,
Extended range fuel tanks hold ____ U.S. gallons.
Total standard unusable fuel is ____ U.S. gallons,
Total extended unusable fuel is ____ U.S. gallons.
- 53, 43, 4, 3
 - 43, 54, 3, 4
 - 54, 44, 2, 3
 - 43, 50, 4, 3
23. There are ____ points from which to drain fuel during the C-172P preflight.
- 5
 - 8
 - 3
 - 15
24. The fuel shutoff valve is located ____ in the C-172P.
- on the floor between the pilots seats
 - above and to the right of the fuel selector control
 - below the primer
 - under the pilot's/left seat
25. What is the oil capacity of the C-172M model?
- 8
 - 10
 - 6
 - 7