

06/13/2011

Bank: (Recreational / Private Pilot)

Airman Knowledge Test Question Bank

The FAA computer-assisted testing system is supported by a series of supplement publications. These publications, available through several aviation publishers, include the graphics, legends, and maps that are needed to successfully respond to certain test items. Use the following URL to download a complete list of associated supplement books:

http://www.faa.gov/training_testing/testing/airmen/test_questions/

The Learning Statement Reference Guide for Airman Knowledge Testing contains listings of learning statements with their associated codes. It can be located at:

http://www.faa.gov/training_testing/testing/airmen/media/LearningStatementReferenceGuide.pdf

1. PLT309 PVT
(Refer to figure 2.) If an airplane weighs 2,300 pounds, what approximate weight would the airplane structure be required to support during a 60° banked turn while maintaining altitude?
A) 2,300 pounds.
B) 3,400 pounds.
C) 4,600 pounds.
2. PLT134 PVT
How will frost on the wings of an airplane affect takeoff performance?
A) Frost will disrupt the smooth flow of air over the wing, adversely affecting its lifting capability.
B) Frost will change the camber of the wing, increasing its lifting capability.
C) Frost will cause the airplane to become airborne with a higher angle of attack, decreasing the stall speed.
3. PLT242 PVT
What force makes an airplane turn?
A) The horizontal component of lift.
B) The vertical component of lift.
C) Centrifugal force.
4. PLT243 PVT
In what flight condition is torque effect the greatest in a single-engine airplane?
A) Low airspeed, high power, high angle of attack.
B) Low airspeed, low power, low angle of attack.
C) High airspeed, high power, high angle of attack.
5. PLT213 PVT
What determines the longitudinal stability of an airplane?
A) The location of the CG with respect to the center of lift.
B) The effectiveness of the horizontal stabilizer, rudder, and rudder trim tab.
C) The relationship of thrust and lift to weight and drag.
6. PLT245 PVT
In what flight condition must an aircraft be placed in order to spin?
A) Partially stalled with one wing low.
B) In a steep diving spiral.
C) Stalled.

7. PLT477 PVT

As altitude increases, the indicated airspeed at which a given airplane stalls in a particular configuration will

- A) decrease as the true airspeed decreases.
- B) decrease as the true airspeed increases.
- C) remain the same regardless of altitude.

8. PLT168 PVT

The angle of attack at which an airplane wing stalls will

- A) increase if the CG is moved forward.
- B) change with an increase in gross weight.
- C) remain the same regardless of gross weight.

9. PLT194 PVT

An ATC radar facility issues the following advisory to a pilot flying north in a calm wind:

‘TRAFFIC 9 O’CLOCK, 2 MILES, SOUTHBOUND...’

Where should the pilot look for this traffic?

- A) South.
- B) North.
- C) West.

10. PLT012 PVT

(Refer to figure 36.) What is the expected fuel consumption for a 1,000-nautical mile flight under the following conditions?

Pressure altitude	8,000 ft
Temperature	22 °C
Manifold pressure	20.8 inches Hg
Wind	Calm

- A) 60.2 gallons.
- B) 70.1 gallons.
- C) 73.2 gallons.

11. PLT124 PVT

(Refer to figure 8.) What is the effect of a temperature decrease and a pressure altitude increase on the density altitude from 90 °F and 1,250 feet pressure altitude to 55 °F and 1,750 feet pressure altitude?

- A) 1,300-foot decrease.
- B) 1,700-foot decrease.
- C) 1,700-foot increase.

12. PLT019 PVT

(Refer to figure 8.) Determine the pressure altitude at an airport that is 1,386 feet MSL with an altimeter setting of 29.97.

- A) 1,341 feet MSL.
- B) 1,451 feet MSL.
- C) 1,562 feet MSL.

13. PLT008 PVT

(Refer to figure 38.) Determine the approximate total distance required to land over a 50-foot obstacle.

OAT	90 °F
Pressure altitude	4,000 ft
Weight	2,800 lb

Headwind component 10 kts

- A) 1,525 feet.
- B) 1,775 feet.
- C) 1,950 feet.

14. PLT011 PVT

(Refer to figure 41.) Determine the total distance required for takeoff to clear a 50-foot obstacle.

OAT Std
 Pressure altitude 4,000 ft
 Takeoff weight 2,800 lb
 Headwind component Calm

- A) 1,500 feet.
- B) 1,750 feet.
- C) 2,000 feet.

15. PLT402 PVT

When must the battery in an emergency locator transmitter (ELT) be replaced (or recharged if the battery is rechargeable)?

- A) After one-half the battery's useful life.
- B) During each annual and 100-hour inspection.
- C) Every 24 calendar months.

16. PLT161 PVT

If Air Traffic Control advises that radar service is terminated when the pilot is departing Class C airspace, the transponder should be set to code

- A) 0000.
- B) 1200.
- C) 4096.

17. PLT473 PVT

One of the main functions of flaps during approach and landing is to

- A) decrease the angle of descent without increasing the airspeed.
- B) permit a touchdown at a higher indicated airspeed.
- C) increase the angle of descent without increasing the airspeed.

18. PLT278 PVT

What is an important airspeed limitation that is not color coded on airspeed indicators?

- A) Never-exceed speed.
- B) Maximum structural cruising speed.
- C) Maneuvering speed.

19. PLT088 PVT

(Refer to figure 4.) What is the maximum structural cruising speed?

- A) 100 MPH.
- B) 165 MPH.
- C) 208 MPH.

20. PLT041 PVT

Altimeter setting is the value to which the barometric pressure scale of the altimeter is set so the altimeter indicates

- A) calibrated altitude at field elevation.
- B) absolute altitude at field elevation.
- C) true altitude at field elevation.

21. PLT166 PVT

If it is necessary to set the altimeter from 29.15 to 29.85, what change occurs?

- A) 70-foot increase in indicated altitude.
- B) 70-foot increase in density altitude.
- C) 700-foot increase in indicated altitude.

22. PLT023 PVT

What is true altitude?

- A) The vertical distance of the aircraft above sea level.
- B) The vertical distance of the aircraft above the surface.
- C) The height above the standard datum plane.

23. PLT215 PVT

In the Northern Hemisphere, the magnetic compass will normally indicate a turn toward the south when

- A) a left turn is entered from an east heading.
- B) a right turn is entered from a west heading.
- C) the aircraft is decelerated while on a west heading.

24. PLT187 PVT

(Refer to figure 5.) A turn coordinator provides an indication of the

- A) movement of the aircraft about the yaw and roll axis.
- B) angle of bank up to but not exceeding 30°.
- C) attitude of the aircraft with reference to the longitudinal axis.

25. PLT337 PVT

If the pitot tube and outside static vents become clogged, which instruments would be affected?

- A) The altimeter, airspeed indicator, and turn-and-slip indicator.
- B) The altimeter, airspeed indicator, and vertical speed indicator.
- C) The altimeter, attitude indicator, and turn-and-slip indicator.

26. PLT136 PVT

With regard to carburetor ice, float-type carburetor systems in comparison to fuel injection systems are generally considered to be

- A) more susceptible to icing.
- B) equally susceptible to icing.
- C) susceptible to icing only when visible moisture is present.

27. PLT249 PVT

While cruising at 9,500 feet MSL, the fuel/air mixture is properly adjusted. What will occur if a descent to 4,500 feet MSL is made without readjusting the mixture?

- A) The fuel/air mixture may become excessively lean.
- B) There will be more fuel in the cylinders than is needed for normal combustion, and the excess fuel will absorb heat and cool the engine.
- C) The excessively rich mixture will create higher cylinder head temperatures and may cause detonation.

28. PLT190 PVT
If an aircraft is equipped with a fixed-pitch propeller and a float-type carburetor, the first indication of carburetor ice would most likely be
A) a drop in oil temperature and cylinder head temperature.
B) engine roughness.
C) loss of RPM.
29. PLT189 PVT
Applying carburetor heat will
A) result in more air going through the carburetor.
B) enrich the fuel/air mixture.
C) not affect the fuel/air mixture.
30. PLT250 PVT
If the grade of fuel used in an aircraft engine is lower than specified for the engine, it will most likely cause
A) a mixture of fuel and air that is not uniform in all cylinders.
B) lower cylinder head temperatures.
C) detonation.
31. PLT478 PVT
One purpose of the dual ignition system on an aircraft engine is to provide for
A) improved engine performance.
B) uniform heat distribution.
C) balanced cylinder head pressure.
32. PLT115 PVT
If a pilot suspects that the engine (with a fixed-pitch propeller) is detonating during climb-out after takeoff, the initial corrective action to take would be to
A) lean the mixture.
B) lower the nose slightly to increase airspeed.
C) apply carburetor heat.
33. PLT343 PVT
If the engine oil temperature and cylinder head temperature gauges have exceeded their normal operating range, the pilot may have been operating with
A) the mixture set too rich.
B) higher-than-normal oil pressure.
C) too much power and with the mixture set too lean.
34. PLT253 PVT
During the run-up at a high-elevation airport, a pilot notes a slight engine roughness that is not affected by the magneto check but grows worse during the carburetor heat check. Under these circumstances, what would be the most logical initial action?
A) Check the results obtained with a leaner setting of the mixture.
B) Taxi back to the flight line for a maintenance check.
C) Reduce manifold pressure to control detonation.
35. PLT324 PVT
An abnormally high engine oil temperature indication may be caused by
A) the oil level being too low.

- B) operating with a too high viscosity oil.
- C) operating with an excessively rich mixture.

36. PLT351 PVT

What effect does high density altitude, as compared to low density altitude, have on propeller efficiency and why?

- A) Efficiency is increased due to less friction on the propeller blades.
- B) Efficiency is reduced because the propeller exerts less force at high density altitudes than at low density altitudes.
- C) Efficiency is reduced due to the increased force of the propeller in the thinner air.

37. PLT196 PVT

Automatic Terminal Information Service (ATIS) is the continuous broadcast of recorded information concerning

- A) pilots of radar-identified aircraft whose aircraft is in dangerous proximity to terrain or to an obstruction.
- B) nonessential information to reduce frequency congestion.
- C) noncontrol information in selected high-activity terminal areas.

38. PLT140 PVT

Who should not participate in the Land and Hold Short Operations (LAHSO) program?

- A) Recreational pilots only.
- B) Student pilots.
- C) Military pilots.

39. PLT462 PVT

To set the high intensity runway lights on medium intensity, the pilot should click the microphone seven times, and then click it

- A) one time within four seconds.
- B) three time within three seconds.
- C) five times within five seconds.

40. PLT147 PVT

A below glide slope indication from a tri-color VASI is a

- A) red light signal.
- B) pink light signal.
- C) green light signal.

41. PLT077 PVT

(Refer to figure 50.) If the wind is as shown by the landing direction indicator, the pilot should land on

- A) Runway 18 and expect a crosswind from the right.
- B) Runway 22 directly into the wind.
- C) Runway 36 and expect a crosswind from the right.

42. PLT150 PVT

If the aircraft's radio fails, what is the recommended procedure when landing at a controlled airport?

- A) Observe the traffic flow, enter the pattern, and look for a light signal from the tower.
- B) Enter a crosswind leg and rock the wings.
- C) Flash the landing lights and cycle the landing gear while circling the airport.

43. PLT064 PVT

(Refer to figure 23, area 2; and figure 32.) At Coeur D'Alene , which frequency should be used as a Common Traffic Advisory Frequency (CTAF) to self-announce position and intentions?

- A) 122.05 MHz.

- B) 122.1/108.8 MHz.
- C) 122.8 MHz.

44. PLT064 PVT
 (Refer to figure 23, area 2; and figure 32.) What is the correct UNICOM frequency to be used at Coeur D'Alene to request fuel?
 A) 135.075 MHz.
 B) 122.1/108.8 MHz.
 C) 122.8 MHz.

45. PLT064 PVT
 (Refer to figure 27, area 2.) What is the recommended communication procedure when inbound to land at Cooperstown Airport?
 A) Broadcast intentions when 10 miles out on the CTAF/MULTICOM frequency, 122.9 MHz.
 B) Contact UNICOM when 10 miles out on 122.8 MHz.
 C) Circle the airport in a left turn prior to entering traffic.

46. PLT509 PVT
 When landing behind a large aircraft, the pilot should avoid wake turbulence by staying
 A) above the large aircraft's final approach path and landing beyond the large aircraft's touchdown point.
 B) below the large aircraft's final approach path and landing before the large aircraft's touchdown point.
 C) above the large aircraft's final approach path and landing before the large aircraft's touchdown point.

47. PLT040 PVT
 (Refer to figure 26, area 2.) The floor of Class B airspace at Addison Airport is
 A) at the surface.
 B) 3,000 feet MSL.
 C) 3,100 feet MSL.

48. PLT161 PVT
 Under what condition may an aircraft operate from a satellite airport within Class C airspace?
 A) The pilot must file a flight plan prior to departure.
 B) The pilot must monitor ATC until clear of the Class C airspace.
 C) The pilot must contact ATC as soon as practicable after takeoff.

49. PLT161 PVT
 (Refer to figure 24, area 3.) What is the floor of the Savannah Class C airspace at the shelf area (outer circle)?
 A) 1,300 feet AGL.
 B) 1,300 feet MSL.
 C) 1,700 feet MSL.

50. PLT064 PVT
 (Refer to figure 22, area 3.) What type military flight operations should a pilot expect along IR 644?
 A) IFR training flights above 1,500 feet AGL at speeds in excess of 250 knots.
 B) VFR training flights above 1,500 feet AGL at speeds less than 250 knots.
 C) Instrument training flights below 1,500 feet AGL at speeds in excess of 150 knots.

51. PLT123 PVT
 After takeoff, which airspeed would the pilot use to gain the most altitude in a given period of time?

- A) V_Y
- B) V_X
- C) V_A

52. PLT119 PVT

During a night flight, you observe steady red and green lights ahead and at the same altitude. What is the general direction of movement of the other aircraft?

- A) The other aircraft is crossing to the left.
- B) The other aircraft is flying away from you.
- C) The other aircraft is approaching head-on.

53. PLT099 PVT

The most effective method of scanning for other aircraft for collision avoidance during nighttime hours is to use

- A) regularly spaced concentration on the 3-, 9-, and 12-o'clock positions.
- B) a series of short, regularly spaced eye movements to search each 30-degree sector.
- C) peripheral vision by scanning small sectors and utilizing offcenter viewing.

54. PLT125 PVT

What procedure is recommended when climbing or descending VFR on an airway?

- A) Execute gentle banks, left and right for continuous visual scanning of the airspace.
- B) Advise the nearest FSS of the altitude changes.
- C) Fly away from the centerline of the airway before changing altitude.

55. PLT271 PVT

Risk management, as part of the aeronautical decision making (ADM) process, relies on which features to reduce the risks associated with each flight?

- A) Application of stress management and risk element procedures.
- B) Situational awareness, problem recognition, and good judgment.
- C) The mental process of analyzing all information in a particular situation and making a timely decision on what action to take.

56. PLT097 PVT

Susceptibility to carbon monoxide poisoning increases as

- A) altitude increases.
- B) altitude decreases.
- C) air pressure increases.

57. PLT330 PVT

Which statement best defines hypoxia?

- A) A state of oxygen deficiency in the body.
- B) An abnormal increase in the volume of air breathed.
- C) A condition of gas bubble formation around the joints or muscles.

58. PLT332 PVT

When a stressful situation is encountered in flight, an abnormal increase in the volume of air breathed in and out can cause a condition known as

- A) hyperventilation.
- B) aerosinusitis.
- C) aerotitis.

59. PLT334 PVT
The danger of spatial disorientation during flight in poor visual conditions may be reduced by
A) shifting the eyes quickly between the exterior visual field and the instrument panel.
B) having faith in the instruments rather than taking a chance on the sensory organs.
C) leaning the body in the opposite direction of the motion of the aircraft.

60. PLT204 PVT
The correct method of stating 4,500 feet MSL to ATC is
A) 'FOUR THOUSAND FIVE HUNDRED.'
B) 'FOUR POINT FIVE.'
C) 'FORTY-FIVE HUNDRED FEET MSL.'

61. PLT101 PVT
(Refer to figure 26, area 4.) The airspace directly overlying Fort Worth Meacham is
A) Class B airspace to 10,000 feet MSL.
B) Class C airspace to 5,000 feet MSL.
C) Class D airspace to 3,200 feet MSL.

62. PLT012 PVT
(Refer to figure 28.) An aircraft departs an airport in the central standard time zone at 0845 CST for a 2-hour flight to an airport located in the mountain standard time zone. The landing should be at what coordinated universal time?
A) 1345Z.
B) 1445Z.
C) 1645Z.

63. PLT012 PVT
(Refer to figure 25). Determine the magnetic course from Airpark East Airport (area 1) to Winnsboro Airport (area 2). Magnetic variation is 6°30'E.
A) 075°.
B) 082°.
C) 091°.

64. PLT012 PVT
(Refer to figure 22.) What is the estimated time en route from Mercer County Regional Airport (area 3) to Minot International (area 1)? The wind is from 330° at 25 knots and the true airspeed is 100 knots. Add 3-1/2 minutes for departure and climb-out.
A) 44 minutes.
B) 48 minutes.
C) 52 minutes.

65. PLT064 PVT
(Refer to figure 21.) Determine the magnetic course from First Flight Airport (area 5) to Hampton Roads Airport (area 2).
A) 141°.
B) 321°.
C) 331°.

66. PLT455 PVT
(Refer to figure 52.) If more than one cruising altitude is intended, which should be entered in block 7 of the flight plan?
A) Initial cruising altitude.
B) Highest cruising altitude.

C) Lowest cruising altitude.

67. PLT515 PVT

How should contact be established with an En Route Flight Advisory Service (EFAS) station, and what service would be expected?

- A) Call EFAS on 122.2 for routine weather, current reports on hazardous weather, and altimeter settings.
- B) Call flight assistance on 122.5 for advisory service pertaining to severe weather.
- C) Call Flight Watch on 122.0 for information regarding actual weather and thunderstorm activity along proposed route.

68. PLT014 PVT

(Refer to figure 31, illustration 8.) If the magnetic bearing TO the station is 135°, the magnetic heading is

- A) 135°.
- B) 270°.
- C) 360°.

69. PLT014 PVT

(Refer to figure 30, illustration 2.) Determine the approximate heading to intercept the 180° bearing TO the station.

- A) 040°.
- B) 160°.
- C) 220°.

70. PLT090 PVT

(Refer to figure 29, illustration 8.) The VOR receiver has the indications shown. What radial is the aircraft crossing?

- A) 030°.
- B) 210°.
- C) 300°.

71. PLT090 PVT

(Refer to figure 27, areas 4 and 3; and figure 29.) The VOR is tuned to Jamestown VOR, and the aircraft is positioned over Cooperstown Airport. Which VOR indication is correct?

- A) 1.
- B) 4.
- C) 6.

72. PLT101 PVT

(Refer to figure 26, area 5.) The VOR is tuned to the Dallas/Fort Worth VORTAC. The omnibearing selector (OBS) is set on 253°, with a TO indication, and a right course deviation indicator (CDI) deflection. What is the aircraft's position from the VORTAC?

- A) East-northeast.
- B) North-northeast.
- C) West-southwest.

73. PLT012 PVT

(Refer to figure 22.) What course should be selected on the omnibearing selector (OBS) to make a direct flight from Mercer County Regional Airport (area 3) to the Minot VORTAC (area 1) with a TO indication?

- A) 359°.
- B) 179°.
- C) 001°.

74. PLT090 PVT

(Refer to figure 21.) What is your approximate position on low altitude airway Victor 1, southwest of Norfolk (area 1), if the VOR receiver indicates you are on the 340° radial of Elizabeth City VOR (area 3)?

- A) 15 nautical miles from Norfolk VORTAC.
- B) 18 nautical miles from Norfolk VORTAC.
- C) 23 nautical miles from Norfolk VORTAC.

75. PLT335 PVT

(Refer to figure 24.) What is the approximate position of the aircraft if the VOR receivers indicate the 320° radial of Savannah VORTAC (area 3) and the 184° radial of Allendale VOR (area 1)?

- A) Town of Guyton.
- B) Town of Springfield.
- C) 3 miles east of Marlow.

76. PLT064 PVT

(Refer to figure 23, area 2 and legend 1.) For information about the parachute jumping and glider operations at Silverwood Airport, refer to

- A) notes on the border of the chart.
- B) the Airport/Facility Directory.
- C) the Notices to Airmen (NOTAM) publication.

77. PLT506 PVT

Which V-speed represents maneuvering speed?

- A) VA.
- B) VLO.
- C) VNE.

78. PLT446 PVT

Preventive maintenance has been performed on an aircraft. What paperwork is required?

- A) A full, detailed description of the work done must be entered in the airframe logbook.
- B) The date the work was completed, and the name of the person who did the work must be entered in the airframe and engine logbook.
- C) The signature, certificate number, and kind of certificate held by the person approving the work and a description of the work must be entered in the aircraft maintenance records.

79. PLT447 PVT

A Third-Class Medical Certificate is issued to a 36-year-old pilot on August 10, this year. To exercise the privileges of a Private Pilot Certificate, the medical certificate will be valid until midnight on

- A) August 10, 3 years later.
- B) August 31, 3 years later.
- C) August 31, 5 years later.

80. PLT399 PVT

What document(s) must be in your personal possession or readily accessible in the aircraft while operating as pilot in command of an aircraft?

- A) Certificates showing accomplishment of a checkout in the aircraft and a current biennial flight review.
- B) A pilot certificate with an endorsement showing accomplishment of an annual flight review and a pilot logbook showing recency of experience.
- C) An appropriate pilot certificate and an appropriate current medical certificate if required.

81. PLT448 PVT
Before a person holding a private pilot certificate may act as pilot in command of a high-performance airplane, that person must have
- A) passed a flight test in that airplane from an FAA inspector.
 - B) an endorsement in that person's logbook that he or she is competent to act as pilot in command.
 - C) received ground and flight instruction from an authorized flight instructor who then endorses that person's logbook.
82. PLT451 PVT
The pilot in command is required to hold a type rating in which aircraft?
- A) Aircraft operated under an authorization issued by the Administrator.
 - B) Aircraft having a gross weight of more than 12,500 pounds.
 - C) Aircraft involved in ferry flights, training flights, or test flights.
83. PLT161 PVT
Unless otherwise specified, Federal Airways include that Class E airspace extending upward from
- A) 700 feet above the surface up to and including 17,999 feet MSL.
 - B) 1,200 feet above the surface up to and including 17,999 feet MSL.
 - C) the surface up to and including 18,000 feet MSL.
84. PLT369 PVT
No person may operate an aircraft in acrobatic flight when the flight visibility is less than
- A) 3 miles.
 - B) 5 miles.
 - C) 7 miles.
85. PLT373 PVT
Which is normally prohibited when operating a restricted category civil aircraft?
- A) Flight under instrument flight rules.
 - B) Flight over a densely populated area.
 - C) Flight within Class D airspace.
86. PLT373 PVT
Where may an aircraft's operating limitations be found?
- A) On the Airworthiness Certificate.
 - B) In the current, FAA-approved flight manual, approved manual material, markings, and placards, or any combination thereof.
 - C) In the aircraft airframe and engine logbooks.
87. PLT375 PVT
If an alteration or repair substantially affects an aircraft's operation in flight, that aircraft must be test flown by an appropriately-rated pilot and approved for return to service prior to being operated
- A) by any private pilot.
 - B) with passengers aboard.
 - C) for compensation or hire.
88. PLT374 PVT
The responsibility for ensuring that maintenance personnel make the appropriate entries in the aircraft maintenance records indicating the aircraft has been approved for return to service lies with the
- A) owner or operator.
 - B) pilot in command.

C) mechanic who performed the work.

89. PLT426 PVT

What aircraft inspections are required for rental aircraft that are also used for flight instruction?

- A) Annual condition and 100-hour inspections.
- B) Biannual condition and 100-hour inspections.
- C) Annual condition and 50-hour inspections.

90. PLT201 PVT

Which is the correct traffic pattern departure procedure to use at a noncontrolled airport?

- A) Depart in any direction consistent with safety, after crossing the airport boundary.
- B) Make all turns to the left.
- C) Comply with any FAA traffic pattern established for the airport.

91. PLT161 PVT

When flying in the airspace underlying Class B airspace, the maximum speed authorized is

- A) 200 knots.
- B) 230 knots.
- C) 250 knots.

92. PLT467 PVT

What minimum flight visibility is required for VFR flight operations on an airway below 10,000 feet MSL?

- A) 1 mile.
- B) 3 miles.
- C) 4 miles.

93. PLT468 PVT

The minimum distance from clouds required for VFR operations on an airway below 10,000 feet MSL is

- A) remain clear of clouds.
- B) 500 feet below, 1,000 feet above, and 2,000 feet horizontally.
- C) 500 feet above, 1,000 feet below, and 2,000 feet horizontally.

94. PLT393 PVT

What minimum radio equipment is required for operation within Class C airspace?

- A) Two-way radio communications equipment and a 4096-code transponder.
- B) Two-way radio communications equipment, a 4096-code transponder, and DME.
- C) Two-way radio communications equipment, a 4096-code transponder, and an encoding altimeter.

95. PLT497 PVT

An operable 4096-code transponder and Mode C encoding altimeter are required in

- A) Class B airspace and within 30 miles of the Class B primary airport.
- B) Class D airspace.
- C) Class E airspace below 10,000 feet MSL.

96. PLT163 PVT

Outside controlled airspace, the minimum flight visibility requirement for VFR flight above 1,200 feet AGL and below 10,000 feet MSL during daylight hours is

- A) 1 mile.
- B) 3 miles.

C) 5 miles.

97. PLT383 PVT

Unless otherwise specifically authorized, no person may operate an aircraft that has an experimental certificate

- A) beneath the floor of Class B airspace.
- B) over a densely populated area or in a congested airway.
- C) from the primary airport within Class D airspace.

98. PLT463 PVT

Under what condition, if any, may a pilot allow a person who is obviously under the influence of drugs to be carried aboard an aircraft?

- A) In an emergency or if the person is a medical patient under proper care.
- B) Only if the person does not have access to the cockpit or pilot's compartment.
- C) Under no condition.

99. PLT372 PVT

Completion of an annual condition inspection and the return of the aircraft to service should always be indicated by

- A) the relicensing date on the Registration Certificate.
- B) an appropriate notation in the aircraft maintenance records.
- C) an inspection sticker placed on the instrument panel that lists the annual inspection completion date.

100. PLT403 PVT

When would a pilot be required to submit a detailed report of an emergency which caused the pilot to deviate from an ATC clearance?

- A) Within 48 hours if requested by ATC.
- B) Immediately.
- C) Within 7 days.

101. PLT431 PVT

No person may operate an aircraft in formation flight

- A) over a densely populated area.
- B) in Class D airspace under special VFR.
- C) except by prior arrangement with the pilot in command of each aircraft.

102. PLT413 PVT

What is the specific fuel requirement for flight under VFR at night in an airplane?

- A) Enough to complete the flight at normal cruising speed with adverse wind conditions.
- B) Enough to fly to the first point of intended landing and to fly after that for 30 minutes at normal cruising speed.
- C) Enough to fly to the first point of intended landing and to fly after that for 45 minutes at normal cruising speed.

103. PLT141 PVT

A steady green light signal directed from the control tower to an aircraft in flight is a signal that the pilot

- A) is cleared to land.
- B) should give way to other aircraft and continue circling.
- C) should return for landing.

104. PLT444 PVT

What action, if any, is appropriate if the pilot deviates from an ATC instruction during an emergency and is given priority?

- A) Take no special action since you are pilot in command.

- B) File a detailed report within 48 hours to the chief of the appropriate ATC facility, if requested.
- C) File a report to the FAA Administrator, as soon as possible.

105. PLT401 PVT

Under what conditions may objects be dropped from an aircraft?

- A) Only in an emergency.
- B) If precautions are taken to avoid injury or damage to persons or property on the surface.
- C) If prior permission is received from the Federal Aviation Administration.

106. PLT414 PVT

A seaplane and a motorboat are on crossing courses. If the motorboat is to the left of the seaplane, which has the right-of-way?

- A) The motorboat.
- B) The seaplane.
- C) Both should alter course to the right.

107. PLT376 PVT

A special VFR clearance authorizes the pilot of an aircraft to operate VFR while within Class D airspace when the visibility is

- A) less than 1 mile and the ceiling is less than 1,000 feet.
- B) at least 1 mile and the aircraft can remain clear of clouds.
- C) at least 3 miles and the aircraft can remain clear of clouds.

108. PLT161 PVT

An operable 4096-code transponder with an encoding altimeter is required in which airspace?

- A) Class A, Class B (and within 30 miles of the Class B primary airport), and Class C.
- B) Class D and Class E (below 10,000 feet MSL).
- C) Class D and Class G (below 10,000 feet MSL).

109. PLT044 PVT

Unless otherwise authorized, two-way radio communications with Air Traffic Control are required for landings or takeoffs

- A) at all tower controlled airports regardless of weather conditions.
- B) at all tower controlled airports only when weather conditions are less than VFR.
- C) at all tower controlled airports within Class D airspace only when weather conditions are less than VFR.

110. PLT366 PVT

Which incident requires an immediate notification to the nearest NTSB field office?

- A) A forced landing due to engine failure.
- B) Landing gear damage, due to a hard landing.
- C) Flight control system malfunction or failure.

111. PLT290 PVT

What information is contained in a CONVECTIVE SIGMET?

- A) Tornadoes, embedded thunderstorms, and hail 3/4 inch or greater in diameter.
- B) Severe icing, severe turbulence, or widespread dust storms lowering visibility to less than 3 miles.
- C) Surface winds greater than 40 knots or thunderstorms equal to or greater than video integrator processor (VIP) level 4.

112. PLT076 PVT

(Refer to figure 17.) What wind is forecast for STL at 9,000 feet?

- A) 230° true at 32 knots.

- B) 230° true at 25 knots.
- C) 230° magnetic at 25 knots.

113. PLT026 PVT

For aviation purposes, ceiling is defined as the height above the Earth's surface of the

- A) lowest reported obscuration and the highest layer of clouds reported as overcast.
- B) lowest broken or overcast layer or vertical visibility into an obscuration.
- C) lowest layer of clouds reported as scattered, broken, or thin.

114. PLT059 PVT

(Refer to figure 12.) What are the current conditions depicted for Chicago Midway Airport (KMDW)?

- A) Sky 700 feet overcast, visibility 1-1/2SM, rain.
- B) Sky 7000 feet overcast, visibility 1-1/2SM, heavy rain.
- C) Sky 700 feet overcast, visibility 11, occasionally 2SM, with rain.

115. PLT061 PVT

(Refer to figure 14.) If the terrain elevation is 1,295 feet MSL, what is the height above ground level of the base of the ceiling?

- A) 505 feet AGL.
- B) 1,295 feet AGL.
- C) 6,586 feet AGL.

116. PLT072 PVT

(Refer to figure 15.) In the TAF from KOKC, the clear sky becomes

- A) overcast at 2,000 feet during the forecast period between 2200Z and 2400Z.
- B) overcast at 200 feet with a 40 percent probability of becoming overcast at 600 feet during the forecast period between 2200Z and 2400Z.
- C) overcast at 200 feet with the probability of becoming overcast at 400 feet during the forecast period between 2200Z and 2400Z.

117. PLT514 PVT

Which type weather briefing should a pilot request, when departing within the hour, if no preliminary weather information has been received?

- A) Outlook briefing.
- B) Abbreviated briefing.
- C) Standard briefing.

118. PLT289 PVT

(Refer to figure 18.) Of what value is the Weather Depiction Chart to the pilot?

- A) For determining general weather conditions on which to base flight planning.
- B) For a forecast of cloud coverage, visibilities, and frontal activity.
- C) For determining frontal trends and air mass characteristics.

119. PLT071 PVT

(Refer to figure 18.) The IFR weather in northern Texas is due to

- A) intermittent rain.
- B) low ceilings.
- C) dust devils.

120. PLT290 PVT

What is indicated when a current CONVECTIVE SIGMET forecasts thunderstorms?

- A) Moderate thunderstorms covering 30 percent of the area.
- B) Moderate or severe turbulence.
- C) Thunderstorms obscured by massive cloud layers.

121. PLT192 PVT

The suffix 'nimbus,' used in naming clouds, means

- A) a cloud with extensive vertical development.
- B) a rain cloud.
- C) a middle cloud containing ice pellets.

122. PLT512 PVT

If the temperature/dewpoint spread is small and decreasing, and the temperature is 62 °F, what type weather is most likely to develop?

- A) Freezing precipitation.
- B) Thunderstorms.
- C) Fog or low clouds.

123. PLT511 PVT

One of the most easily recognized discontinuities across a front is

- A) a change in temperature.
- B) an increase in cloud coverage.
- C) an increase in relative humidity.

124. PLT274 PVT

One in-flight condition necessary for structural icing to form is

- A) small temperature/dewpoint spread.
- B) stratiform clouds.
- C) visible moisture.

125. PLT274 PVT

In which environment is aircraft structural ice most likely to have the highest accumulation rate?

- A) Cumulus clouds with below freezing temperatures.
- B) Freezing drizzle.
- C) Freezing rain.

126. PLT226 PVT

Low-level turbulence can occur and icing can become hazardous in which type of fog?

- A) Rain-induced fog.
- B) Upslope fog.
- C) Steam fog.

127. PLT512 PVT

What are the processes by which moisture is added to unsaturated air?

- A) Evaporation and sublimation.
- B) Heating and condensation.
- C) Supersaturation and evaporation.

128. PLT493 PVT

Which conditions result in the formation of frost?

- A) The temperature of the collecting surface is at or below freezing when small droplets of moisture fall on the surface.
- B) The temperature of the collecting surface is at or below the dewpoint of the adjacent air and the dewpoint is below freezing.
- C) The temperature of the surrounding air is at or below freezing when small drops of moisture fall on the collecting surface.

129. PLT206 PVT

Which factor would tend to increase the density altitude at a given airport?

- A) An increase in barometric pressure.
- B) An increase in ambient temperature.
- C) A decrease in relative humidity.

130. PLT023 PVT

Under which condition will pressure altitude be equal to true altitude?

- A) When the atmospheric pressure is 29.92 inches Hg.
- B) When standard atmospheric conditions exist.
- C) When indicated altitude is equal to the pressure altitude.

131. PLT345 PVT

Under what condition is pressure altitude and density altitude the same value?

- A) At sea level, when the temperature is 0 °F.
- B) When the altimeter has no installation error.
- C) At standard temperature.

132. PLT167 PVT

If a flight is made from an area of low pressure into an area of high pressure without the altimeter setting being adjusted, the altimeter will indicate

- A) the actual altitude above sea level.
- B) higher than the actual altitude above sea level.
- C) lower than the actual altitude above sea level.

133. PLT512 PVT

What is the approximate base of the cumulus clouds if the surface air temperature at 1,000 feet MSL is 70 °F and the dewpoint is 48 °F?

- A) 4,000 feet MSL.
- B) 5,000 feet MSL.
- C) 6,000 feet MSL.

134. PLT192 PVT

Moist, stable air flowing upslope can be expected to

- A) produce stratus type clouds.
- B) cause showers and thunderstorms.
- C) develop convective turbulence.

135. PLT492 PVT

What feature is associated with a temperature inversion?

- A) A stable layer of air.
- B) An unstable layer of air.
- C) Chinook winds on mountain slopes.

136. PLT173 PVT

What measurement can be used to determine the stability of the atmosphere?

- A) Atmospheric pressure.
- B) Actual lapse rate.
- C) Surface temperature.

137. PLT165 PVT

What causes variations in altimeter settings between weather reporting points?

- A) Unequal heating of the Earth's surface.
- B) Variation of terrain elevation.
- C) Coriolis force.

138. PLT301 PVT

A temperature inversion would most likely result in which weather condition?

- A) Clouds with extensive vertical development above an inversion aloft.
- B) Good visibility in the lower levels of the atmosphere and poor visibility above an inversion aloft.
- C) An increase in temperature as altitude is increased.

139. PLT301 PVT

Which weather conditions should be expected beneath a low-level temperature inversion layer when the relative humidity is high?

- A) Smooth air, poor visibility, fog, haze, or low clouds.
- B) Light wind shear, poor visibility, haze, and light rain.
- C) Turbulent air, poor visibility, fog, low stratus type clouds, and showery precipitation.

140. PLT495 PVT

During the life cycle of a thunderstorm, which stage is characterized predominately by downdrafts?

- A) Cumulus.
- B) Dissipating.
- C) Mature.

141. PLT495 PVT

A nonfrontal, narrow band of active thunderstorms that often develop ahead of a cold front is known as a

- A) prefrontal system.
- B) squall line.
- C) dry line.

142. PLT263 PVT

Upon encountering severe turbulence, which flight condition should the pilot attempt to maintain?

- A) Constant altitude and airspeed.
- B) Constant angle of attack.
- C) Level flight attitude.

143. PLT495 PVT

What feature is normally associated with the cumulus stage of a thunderstorm?

- A) Roll cloud.
- B) Continuous updraft.
- C) Frequent lightning.

144. PLT516 PVT
 The wind at 5,000 feet AGL is southwesterly while the surface wind is southerly. This difference in direction is primarily due to
 A) stronger pressure gradient at higher altitudes.
 B) friction between the wind and the surface.
 C) stronger Coriolis force at the surface.

145. PLT518 PVT
 A pilot can expect a wind-shear zone in a temperature inversion whenever the windspeed at 2,000 to 4,000 feet above the surface is at least
 A) 10 knots.
 B) 15 knots.
 C) 25 knots.

146. PLT021 PVT

GIVEN:

	WEIGHT (LB)	ARM (IN)	MOMENT (LB-IN)
Empty weight	1,495.0	101.4	151,593.0
Pilot and passengers	380.0	64.0	
Fuel (30 gal usable no reserve)		96.0	

The CG is located how far aft of datum?
 A) CG 92.44.
 B) CG 94.01.
 C) CG 119.8.

147. PLT121 PVT

(Refer to figures 33 and 34.) Determine if the airplane weight and balance is within limits.

Front seat occupants	415 lb
Rear seat occupants	110 lb
Fuel, main tanks	44 gal
Fuel, aux. tanks	19 gal
Baggage	32 lb

A) 19 pounds overweight, CG within limits.
 B) 19 pounds overweight, CG out of limits forward.
 C) Weight within limits, CG out of limits.

148. PLT092 PVT

(Refer to figure 35.) What is the maximum amount of baggage that may be loaded aboard the airplane for the CG to remain within the moment envelope?

	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	250	---
Rear passengers	400	---
Baggage	---	---
Fuel, 30 gal	---	---
Oil, 8 qt	---	-0.2

A) 105 pounds.
 B) 110 pounds.

C) 120 pounds.

149.	PLT092	PVT
(Refer to figure 35.) Calculate the moment of the airplane and determine which category is applicable.		
	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	310	---
Rear passengers	96	---
Fuel, 38 gal	---	---
Oil, 8 qt	---	-0.2

- A) 79.2, utility category.
 B) 80.8, utility category.
 C) 81.2, normal category.

150.	PLT092	PVT
(Refer to figure 35.) What is the maximum amount of fuel that may be aboard the airplane on takeoff if loaded as follows?		
	WEIGHT (LB)	MOM/1000
Empty weight	1,350	51.5
Pilot and front passenger	340	---
Rear passengers	310	---
Baggage	45	---
Oil, 8 qt	---	---

- A) 24 gallons.
 B) 32 gallons.
 C) 40 gallons.

151.	PLT003	PVT
An airplane has been loaded in such a manner that the CG is located aft of the aft CG limit. One undesirable flight characteristic a pilot might experience with this airplane would be		
A) a longer takeoff run.		
B) difficulty in recovering from a stalled condition.		
C) stalling at higher-than-normal airspeed.		

152.	PLT395	PVT
What is the definition of a high-performance airplane?		
A) An airplane with 180 horsepower, or retractable landing gear, flaps, and a fixed-pitch propeller.		
B) An airplane with an engine of more than 200 horsepower.		
C) An airplane with a normal cruise speed in excess of 200 knots.		

153.	PLT442	PVT
If recency of experience requirements for night flight are not met and official sunset is 1830, the latest time passengers may be carried is		
A) 1829.		
B) 1859.		
C) 1929.		

154.	PLT465	PVT
With certain exceptions, safety belts are required to be secured about passengers during		
A) taxi, takeoffs, and landings.		

- B) all flight conditions.
- C) flight in turbulent air.

155. PLT123 PVT

The term 'weigh-off' means to determine the

- A) static equilibrium of the balloon as loaded for flight.
- B) amount of gas required for an ascent to a preselected altitude.
- C) standard weight and balance of the balloon.

156. PLT393 PVT

Under what condition, if any, may pilots fly through a restricted area?

- A) When flying on airways with an ATC clearance.
- B) With the controlling agency's authorization.
- C) Regulations do not allow this.

157. PLT237 PVT

What is the relationship of false lift with the wind?

- A) False lift increases as the wind accelerates the balloon.
- B) False lift does not exist if the surface winds are calm.
- C) False lift decreases as the wind accelerates the balloon.

158. PLT389 PVT

The minimum size a launch site should be is at least

- A) twice the height of the balloon.
- B) 100 feet for every 1 knot of wind.
- C) 500 feet on the downwind side.

159. PLT064 PVT

(Refer to figure 22, area 1.) A balloon launched at Flying S Airport drifts southward towards the lighted obstacle. If the altimeter was set to the current altimeter setting upon launch, what should it indicate if the balloon is to clear the obstacle at 500 feet above the top?

- A) 1,531 feet MSL.
- B) 1,809 feet MSL.
- C) 3,649 feet MSL.

160. PLT012 PVT

(Refer to figure 23, area 2.) If a balloon is launched at Ranch Aero (Pvt) Airport with a reported wind from 220° at 5 knots, what should be its approximate position after 2 hours of flight?

- A) Near Hackney (Pvt) Airport.
- B) Crossing the railroad southwest of Granite Airport.
- C) 3-1/2 miles southwest of Rathdrum.

161. PLT078 PVT

(Refer to figure 53.) When approaching Lincoln Municipal from the west at noon for the purpose of landing, initial communications should be with

- A) Lincoln Approach Control on 124.0 MHz.
- B) Minneapolis Center on 128.75 MHz.
- C) Lincoln Tower on 118.5 MHz.

162. PLT116 PVT
FAA advisory circulars (some free, others at cost) are available to all pilots and are obtained by
A) distribution from the nearest FAA district office.
B) ordering those desired from the Government Printing Office.
C) subscribing to the Federal Register.

163. PLT116 PVT
FAA advisory circulars containing subject matter specifically related to Airspace are issued under which subject number?
A) 60.
B) 70.
C) 90.

164. PLT371 PVT
With respect to the certification of airmen, which is a category of aircraft?
A) Gyroplane, helicopter, airship, free balloon.
B) Airplane, rotorcraft, glider, lighter-than-air.
C) Single-engine land and sea, multiengine land and sea.

165. PLT395 PVT
The definition of nighttime is
A) sunset to sunrise.
B) 1 hour after sunset to 1 hour before sunrise.
C) the time between the end of evening civil twilight and the beginning of morning civil twilight.

166. PLT387 PVT
If a certificated pilot changes permanent mailing address and fails to notify the FAA Airmen Certification Branch of the new address, the pilot is entitled to exercise the privileges of the pilot certificate for a period of only
A) 30 days after the date of the move.
B) 60 days after the date of the move.
C) 90 days after the date of the move.

167. PLT449 PVT
To act as pilot in command of an aircraft carrying passengers, a pilot must show by logbook endorsement the satisfactory completion of a flight review or completion of a pilot proficiency check within the preceding
A) 6 calendar months.
B) 12 calendar months.
C) 24 calendar months.

168. PLT427 PVT
Prior to becoming certified as a private pilot with a balloon rating, the pilot must have in his or her possession what class of medical?
A) A third-class medical certificate.
B) A statement from a designated medical examiner.
C) A medical certificate is not required.

169. PLT448 PVT
When must a recreational pilot have a pilot-in-command flight check?
A) Every 400 hours.
B) Every 180 days.

C) If the pilot has less than 400 total flight hours and has not flown as pilot in command in an aircraft within the preceding 180 days.

170. PLT515 PVT

Which weather reports and forecasts are most important for local area balloon operations?

- A) Winds Aloft Forecasts and Radar Summary Charts.
- B) Winds Aloft Forecasts and Surface Analysis Charts.
- C) Winds Aloft Forecasts and Aviation Routine Weather Reports.

171. PLT256 PVT

(Refer to figure 54.) How is the CG affected if radio and oxygen equipment weighing 35 pounds is added at station 43.8? The glider weighs 945 pounds with a moment of 78,000.2 pound-inches prior to adding the equipment.

- A) CG shifts forward 0.79 inch - out of limits forward.
- B) CG shifts forward 1.38 inches - within limits.
- C) CG shifts aft 1.38 inches - out of limits aft.

172. PLT057 PVT

(Refer to figure 57.) The gross weight of the balloon is 1,200 pounds and the maximum height the pilot needs to attain is 5,000 feet. The maximum temperature to achieve this performance is

- A) +37 °F.
- B) +70 °F.
- C) +97 °F.

173. PLT254 PVT

Why should propane tanks not be refueled in a closed trailer or truck?

- A) Propane vapor is one and one-half times heavier than air and will linger in the floor of the truck or trailer.
- B) The propane vapor is odorless and the refuelers may be overcome by the fumes.
- C) Propane is very cold and could cause damage to the truck or trailer.

174. PLT250 PVT

When ample liquid propane is available, propane will vaporize sufficiently to provide proper operation between the temperatures of

- A) +30 to +90 °F.
- B) -44 to +25 °F.
- C) -51 to +20 °F.

175. PLT253 PVT

In hot air balloons, propane is preferred to butane or other hydrocarbons because it

- A) is less volatile.
- B) is slower to vaporize.
- C) has a lower boiling point.

176. PLT251 PVT

If ample propane is available, within which temperature range will propane vaporize sufficiently to provide enough pressure for burner operation during flight?

- A) 0 to 30 °F.
- B) 10 to 30 °F.
- C) 30 to 90 °F.

177. PLT177 PVT
Burner efficiency of a hot air balloon decreases approximately what percent for each 1,000 feet above MSL?
A) 4 percent.
B) 8 percent.
C) 15 percent.

178. PLT208 PVT
What action is most appropriate when an envelope over-temperature condition occurs?
A) Throw all unnecessary equipment overboard.
B) Descend; hover in ground effect until the envelope cools.
C) Land as soon as practical.

179. PLT184 PVT
The windspeed is such that it is necessary to deflate the envelope as rapidly as possible during a landing. When should the deflation port (rip panel) be opened?
A) The instant the gondola contacts the surface.
B) As the balloon skips off the surface the first time and the last of the ballast has been discharged.
C) Just prior to ground contact.

180. PLT219 PVT
How should a roundout from a moderate-rate ascent to level flight be made?
A) Reduce the amount of heat gradually as the balloon is approaching altitude.
B) Cool the envelope by venting and add heat just before arriving at altitude.
C) Vent at altitude and add heat upon settling back down to altitude.

181. PLT125 PVT
What is a hazard of rapid descents?
A) Wind shear can cavitate one side of the envelope, forcing air out of the mouth.
B) The pilot light cannot remain lit with the turbulent air over the basket.
C) Aerodynamic forces may collapse the envelope.

182. PLT130 PVT
In a balloon, best fuel economy in level flight can be accomplished by
A) riding the haze line in a temperature inversion.
B) short blasts of heat at high frequency.
C) long blasts of heat at low frequency.

183. PLT101 PVT
(Refer to figure 27, area 2.) The visibility and cloud clearance requirements to operate VFR during daylight hours over the town of Cooperstown between 1,200 feet AGL and 10,000 feet MSL are
A) 1 mile and clear of clouds.
B) 1 mile and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.
C) 3 miles and 1,000 feet above, 500 feet below, and 2,000 feet horizontally from clouds.

184. PLT411 PVT
To act as pilot in command of an aircraft carrying passengers, the pilot must have made at least three takeoffs and three landings in an aircraft of the same category, class, and if a type rating is required, of the same type, within the preceding
A) 90 days.
B) 12 calendar months.

C) 24 calendar months.

185. PLT400 PVT

In addition to a valid Airworthiness Certificate, what documents or records must be aboard an aircraft during flight?

- A) Aircraft engine and airframe logbooks, and owner's manual.
- B) Radio operator's permit, and repair and alteration forms.
- C) Operating limitations and Registration Certificate.

186. PLT425 PVT

Which records or documents shall the owner or operator of an aircraft keep to show compliance with an applicable Airworthiness Directive?

- A) Aircraft maintenance records.
- B) Airworthiness Certificate and Pilot's Operating Handbook.
- C) Airworthiness and Registration Certificates.

187. PLT316 PVT

(Refer to figure 13.) According to the weather briefing, good balloon weather will begin to deteriorate

- A) soon after 1300Z as the wind starts to increase.
- B) about 1500Z when the lower scattered clouds begin to form.
- C) at 2000Z due to sharp increase in wind conditions.

188. PLT072 PVT

(Refer to figure 15.) In the TAF from KOKC, the 'FM (FROM) Group' is forecast for the hours from 1600Z to 2200Z with the wind from

- A) 180° at 10 knots.
- B) 160° at 10 knots.
- C) 180° at 10 knots, becoming 200° at 13 knots.

189. PLT445 PVT

What should pilots state initially when telephoning a weather briefing facility for preflight weather information?

- A) Tell the number of occupants on board.
- B) Identify themselves as pilots.
- C) State their total flight time.

190. PLT063 PVT

(Refer to figure 19, area B.) What is the top for precipitation of the radar return?

- A) 24,000 feet AGL.
- B) 24,000 feet MSL.
- C) 2,400 feet MSL.

191. PLT353 PVT

What does the heavy dashed line that forms a large rectangular box on a radar summary chart refer to?

- A) Areas of heavy rain.
- B) Severe weather watch area.
- C) Areas of hail 1/4 inch in diameter.

192. PLT173 PVT

What early morning weather observations indicate the possibility of good weather conditions for balloon flight most of the day?

- A) Clear skies and surface winds, 10 knots or less.

- B) Low moving, scattered cumulus clouds and surface winds, 5 knots or less.
- C) Overcast with stratus clouds and surface winds, 5 knots or less.

193. PLT057 PVT

(Refer to figure 58.) Determine the maximum weight allowable for pilot and passenger for a flight at approximately 1,000 feet with a temperature of 68 °F. Launch with 20 gallons of propane.

- A) 580 pounds.
- B) 620 pounds.
- C) 720 pounds.

194. PLT241 PVT

What force provides the forward motion necessary to move a glider through the air?

- A) Lift.
- B) Centripetal force.
- C) Gravity.

195. PLT219 PVT

A pilot unintentionally enters a steep diving spiral to the left. What is the proper way to recover from this attitude without overstressing the glider?

- A) Apply up-elevator pressure to raise the nose.
- B) Apply more up-elevator pressure and then use right aileron pressure to control the overbanking tendency.
- C) Relax the back pressure and shallow the bank; then apply up-elevator pressure until the nose has been raised to the desired position.

196. PLT304 PVT

What corrective action should the sailplane pilot take during takeoff if the towplane is still on the ground and the sailplane is airborne and drifting to the left?

- A) Crab into the wind by holding upwind (right) rudder pressure.
- B) Crab into the wind so as to maintain a position directly behind the towplane.
- C) Establish a right wing low drift correction to remain in the flightpath of the towplane.

197. PLT502 PVT

(Refer to figure 56.) Which illustration is a signal that the glider is unable to release?

- A) 8.
- B) 10.
- C) 11.

198. PLT304 PVT

Which is an advantage of using a CG hook for a winch tow rather than the nose hook?

- A) A greater percent of the line length can be used to reach altitude.
- B) Maximum release altitude is limited.
- C) It is the safest method of launching.

199. PLT185 PVT

(Refer to figure 11.) Which yaw string and inclinometer illustrations indicate a slipping right turn?

- A) 3 and 6.
- B) 2 and 6.
- C) 2 and 4.

200. PLT006 PVT
A sailplane has lost 2,000 feet in 9 nautical miles. The best glide ratio for this sailplane is approximately
A) 24:1.
B) 27:1.
C) 30:1.

201. PLT012 PVT
How many feet will a glider sink in 10 nautical miles if its lift/drag ratio is 23:1?
A) 2,400 feet.
B) 2,600 feet.
C) 4,300 feet.

202. PLT303 PVT
What is the proper airspeed to use when flying between thermals on a cross-country flight against a headwind?
A) The best lift/drag speed increased by one-half the estimated wind velocity.
B) The minimum sink speed increased by one-half the estimated wind velocity.
C) The best lift/drag speed decreased by one-half the estimated wind velocity.

203. PLT132 PVT
To obtain maximum distance over the ground, the airspeed to use is the
A) minimum control speed.
B) best lift/drag speed.
C) minimum sink speed.

204. PLT494 PVT
What corrective action should be taken if, while thermalling at minimum sink speed in turbulent air, the left wing drops while turning to the left?
A) Apply more opposite (right) aileron pressure than opposite (right) rudder pressure to counteract the overbanking tendency.
B) Apply opposite (right) rudder pressure to slow the rate of turn.
C) Lower the nose before applying opposite (right) aileron pressure.

205. PLT054 PVT
(Refer to figure 55.) At what speed will the glider gain the most distance while descending 1,000 feet in still air?
A) 44 MPH.
B) 53 MPH.
C) 83 MPH.

206. PLT381 PVT
If an altimeter setting is not available before flight, to which altitude should the pilot adjust the altimeter?
A) The elevation of the nearest airport corrected to mean sea level.
B) The elevation of the departure area.
C) Pressure altitude corrected for nonstandard temperature.

207. PLT444 PVT
The final authority as to the operation of an aircraft is the
A) Federal Aviation Administration.
B) pilot in command.
C) aircraft manufacturer.

208. PLT496 PVT
When using a towline having a breaking strength more than twice the maximum certificated operating weight of the glider, an approved safety link must be installed at what point(s)?
A) Only the point where the towline is attached to the glider.
B) The point where the towline is attached to the glider and the point of attachment of the towline to the towplane.
C) Only the point where the towline is attached to the towplane.
209. PLT064 PVT
(Refer to figure 21.) Over which area should a glider pilot expect to find the best lift under normal conditions?
A) 5.
B) 6.
C) 7.
210. PLT173 PVT
Where and under what condition can enough lift be found for soaring when the weather is generally stable?
A) On the upwind side of hills or ridges with moderate winds present.
B) In mountain waves that form on the upwind side of the mountains.
C) Over isolated peaks when strong winds are present.
211. PLT120 PVT
Which is considered to be the most hazardous condition when soaring in the vicinity of thunderstorms?
A) Static electricity.
B) Lightning.
C) Wind shear and turbulence.
212. PLT516 PVT
Convective circulation patterns associated with sea breezes are caused by
A) warm, dense air moving inland from over the water.
B) water absorbing and radiating heat faster than the land.
C) cool, dense air moving inland from over the water.
213. PLT516 PVT
What minimum upward current must a glider encounter to maintain altitude?
A) At least 2 feet per second.
B) The same as the glider's sink rate.
C) The same as the adjacent down currents.
214. PLT328 PVT
A pilot plans to fly solo in the front seat of a two-place glider which displays the following placards on the instrument panel:
MINIMUM PILOT WEIGHT: 135 LB
MAXIMUM PILOT WEIGHT: 220 LB
NOTE: Seat ballast should be used as necessary.
The recommended towing speed for all tows is 55 - 65 knots. What action should be taken if the pilot's weight is 125 pounds?
A) Add 10 pounds of seat ballast to the rear seat.
B) Add 10 pounds of seat ballast.
C) Add 45 pounds of seat ballast to obtain the average pilot weight of 170 pounds.
215. PLT021 PVT

(Refer to figure 54.) Calculate the weight and balance of the glider, and determine if the CG is within limits.

Pilot (fwd seat) 160 lb

Passenger (aft seat) 185 lb

A) CG 71.65 inches aft of datum - out of limits forward.

B) CG 79.67 inches aft of datum - within limits.

C) CG 83.43 inches aft of datum - within limits.

216. PLT021 PVT

(Refer to figures 45 and 46.) Approximately how much baggage, if any, may be carried in the gyroplane, without exceeding weight and balance limits?

	WEIGHT (LB)	MOMENT (1000)
Empty weight	1,074	85.6
Oil, 6 qt	---	1.0
Fuel, Full	---	---
Pilot (FWD)	224	---

A) None, overweight.

B) 70 pounds.

C) 100 pounds.

217. PLT131 PVT

Which is a result of the phenomenon of ground effect?

A) The induced angle of attack of each rotor blade is increased.

B) The lift vector becomes more horizontal.

C) The angle of attack generating lift is increased.

218. PLT285 PVT

(Refer to figure 47.) Which airspeed/altitude combination should be avoided during helicopter operations?

A) 20 MPH/200 feet AGL.

B) 35 MPH/175 feet AGL.

C) 40 MPH/75 feet AGL.

219. PLT222 PVT

Under what condition should a helicopter pilot consider using a running takeoff?

A) When gross weight or density altitude prevents a sustained hover at normal hovering altitude.

B) When a normal climb speed is assured between 10 and 20 feet.

C) When the additional airspeed can be quickly converted to altitude.

220. PLT161 PVT

Under what conditions, if any, may a private pilot operate a helicopter under special VFR at night within Class D airspace?

A) The helicopter must be fully instrument equipped and the pilot must be instrument rated.

B) The flight visibility must be at least 1 mile.

C) There are no conditions; regulations permit this.

221. PLT221 PVT

Air damper valves should normally be kept closed during climbs because any air forced into the system would

A) increase the amount of gas that must be exhausted to prevent the airship from ascending at an excessively high rate.

B) increase the amount of air to be exhausted, resulting in a lower rate of ascent.

C) decrease the purity of the gas within the envelope.

222. PLT124 PVT

In relation to the operation of an airship, what is the definition of aerostatics?

- A) The gravitational factors involving equilibrium of a body freely suspended in the atmosphere.
- B) The science of the dynamics involved in the expansion and contraction of hydrogen gas.
- C) The expansion and contraction of the lifting gas helium.

223. PLT153 PVT

How does the pilot know when pressure height has been reached?

- A) Liquid in the gas manometer will rise and the liquid in the air manometer will fall below normal levels.
- B) Liquid in the gas and air manometers will fall below the normal level.
- C) Liquid in the gas manometer will fall and the liquid in the air manometer will rise above normal levels.

224. PLT208 PVT

If an airship should experience failure of both engines during flight and neither engine can be restarted, what initial immediate action must the pilot take?

- A) The airship must be driven down to a landing before control and envelope shape are lost.
- B) The emergency auxiliary power unit must be started for electrical power to the airscoop blowers so that ballonet inflation can be maintained.
- C) Immediate preparations to operate the airship as a free balloon are necessary.

225. PLT133 PVT

Which action is necessary in order to perform a normal descent in an airship?

- A) Valve gas.
- B) Valve air.
- C) Take air into the aft ballonets.

226. PLT153 PVT

During flight in an airship, when is vertical equilibrium established?

- A) When buoyancy is greater than airship weight.
- B) When buoyancy equals airship weight.
- C) When buoyancy is less than airship weight.

227. PLT158 PVT

To check the gas pressures (pressure height) of an airship during a climb, the air damper valves should be

- A) opened forward and closed aft.
- B) opened aft and closed forward.
- C) closed.

228. PLT012 PVT

(Refer to figure 22.) An airship crosses over Minot VORTAC (area 1) at 1056 and over the creek 8 nautical miles south-southeast on Victor 15 at 1108. What should be the approximate position on Victor 15 at 1211?

- A) Over Lake Nettie National Wildlife Refuge.
- B) Crossing the road east of Underwood.
- C) Over the powerlines east of Washburn Airport.

229. PLT440 PVT

When must a pilot who deviates from a regulation during an emergency send a written report of that deviation to the Administrator?

- A) Within 7 days.
- B) Within 10 days.
- C) Upon request.

230. PLT008 PVT

(Refer to figure 40.) Determine the total landing distance to clear a 50-foot obstacle in a gyroplane. The outside air temperature (OAT) is 75°F and the pressure altitude at the airport is 2,500 feet.

- A) 521 feet.
- B) 525 feet.
- C) 529 feet.

231. PLT342 PVT

For internal cooling, reciprocating aircraft engines are especially dependent on

- A) a properly functioning thermostat.
- B) air flowing over the exhaust manifold.
- C) the circulation of lubricating oil.

232. PLT265 PVT

If the pilot experiences ground resonance, and the rotor r.p.m. is not sufficient for flight,

- A) open the throttle full and liftoff.
- B) apply the rotor brake and stop the rotor as soon as possible.
- C) attempt to takeoff at that power setting.

233. PLT197 PVT

When a blade flaps up, the CG moves closer to its axis of rotation giving that blade a tendency to

- A) decelerate.
- B) accelerate.
- C) stabilize its rotational velocity.

234. PLT470 PVT

The maximum forward speed of a helicopter is limited by

- A) retreating blade stall.
- B) the rotor RPM red line.
- C) solidity ratio.

235. PLT268 PVT

With calm wind conditions, which flight operation would require the most power?

- A) A right-hovering turn.
- B) A left-hovering turn.
- C) Hovering out of ground effect.

236. PLT112 PVT

If RPM is low and manifold pressure is high, what initial corrective action should be taken?

- A) Increase the throttle.
- B) Lower the collective pitch.
- C) Raise the collective pitch.

237. PLT250 PVT

What type fuel can be substituted for an aircraft if the recommended octane is not available?

- A) The next higher octane aviation gas.
- B) The next lower octane aviation gas.
- C) Unleaded automotive gas of the same octane rating.

238. PLT175 PVT

Which is a precaution to be observed during an autorotative descent?

- A) Normally, the airspeed is controlled with the collective pitch.
- B) Normally, only the cyclic control is used to make turns.
- C) Do not allow the rate of descent to get too low at zero airspeed.

239. PLT259 PVT

Ground resonance is most likely to develop when

- A) on the ground and harmonic vibrations develop between the main and tail rotors.
- B) a series of shocks causes the rotor system to become unbalanced.
- C) there is a combination of a decrease in the angle of attack on the advancing blade and an increase in the angle of attack on the retreating blade.

240. PLT170 PVT

What is the procedure for a slope landing?

- A) When the downslope skid is on the ground, hold the collective pitch at the same position.
- B) Minimum RPM shall be held until the full weight of the helicopter is on the skid.
- C) When parallel to the slope, slowly lower the upslope skid to the ground prior to lowering the downslope skid.

241. PLT217 PVT

The proper action to initiate a quick stop is to apply

- A) forward cyclic and lower the collective pitch.
- B) aft cyclic and raise the collective pitch.
- C) aft cyclic and lower the collective pitch.

242. PLT515 PVT

What service should a pilot normally expect from an En Route Flight Advisory Service (EFAS) station?

- A) Actual weather information and thunderstorm activity along the route.
- B) Preferential routing and radar vectoring to circumnavigate severe weather.
- C) Severe weather information, changes to flight plans, and receipt of routine position reports.

243. PLT442 PVT

If a recreational or private pilot had a flight review on August 8, this year, when is the next flight review required?

- A) August 8, next year.
- B) August 31, 1 year later.
- C) August 31, 2 years later.

244. PLT163 PVT

Outside controlled airspace, the minimum flight visibility requirement for a recreational pilot flying VFR above 1,200 feet AGL and below 10,000 feet MSL during daylight hours is

- A) 1 mile.
- B) 3 miles.
- C) 5 miles.

245. PLT448 PVT

Under what conditions, if any, may a recreational pilot demonstrate an aircraft in flight to a prospective buyer?

- A) The buyer pays all the operating expenses.
- B) The flight is not outside the United States.
- C) None.

246. PLT442 PVT

Each recreational or private pilot is required to have

- A) a biennial flight review.
- B) an annual flight review.
- C) a semiannual flight review.

247. PLT448 PVT

When may a recreational pilot act as pilot in command on a cross-country flight that exceeds 50 nautical miles from the departure airport?

- A) After attaining 100 hours of pilot-in-command time and a logbook endorsement.
- B) After receiving ground and flight instructions on cross-country training and a logbook endorsement.
- C) 12 calendar months after receiving his or her recreational pilot certificate and a logbook endorsement.

248. PLT163 PVT

What minimum visibility and clearance from clouds are required for a recreational pilot in Class G airspace at 1,200 feet AGL or below during daylight hours?

- A) 1 mile visibility and clear of clouds.
- B) 3 miles visibility and clear of clouds.
- C) 3 miles visibility, 500 feet below the clouds.

249. PLT068 PVT

(Refer to figure 20.) What weather is forecast for the Florida area just ahead of the stationary front during the first 12 hours?

- A) Ceiling 1,000 to 3,000 feet and/or visibility 3 to 5 miles with continuous precipitation.
- B) Ceiling 1,000 to 3,000 feet and/or visibility 3 to 5 miles with intermittent precipitation.
- C) Ceiling less than 1,000 feet and/or visibility less than 3 miles with continuous precipitation.

250. PLT446 PVT

Which operation would be described as preventive maintenance?

- A) Repair of landing gear brace struts.
- B) Replenishing hydraulic fluid.
- C) Repair of portions of skin sheets by making additional seams.

251. PLT472 PVT

While in level cruising flight in a helicopter, a pilot experiences low-frequency vibrations (100 to 400 cycles per minute). These vibrations are normally associated with the

- A) engine.
- B) cooling fan.
- C) main rotor.

252. PLT221 PVT

Which is a correct general rule for pinnacle and ridgeline operations?

- A) Gaining altitude on takeoff is more important than gaining airspeed.
- B) The approach path to a ridgeline is usually perpendicular to the ridge.
- C) A climb to a pinnacle or ridgeline should be performed on the upwind side.

