

Question Bank: (Commercial Pilot)

complete list of associated supplement books:

http://www.faa.gov/education_research/testing/airmen/test_standards/

1. H921 COM

Load factor is the lift generated by the wings of an aircraft at any given time

A) divided by the total weight of the aircraft.

B) multiplied by the total weight of the aircraft.

C) divided by the basic empty weight of the aircraft.

A**2. H921 COM**

Baggage weighing 90 pounds is placed in a normal category airplane's baggage compartment, which is placarded at 100 pounds. If this airplane is subjected to a positive load factor of 3.5 G's, the total load of the baggage would be

A) 315 pounds and would be excessive.

B) 315 pounds and would not be excessive.

C) 350 pounds and would not be excessive.

B**3. H921 COM**

While holding the angle of bank constant in a level turn, if the rate of turn is varied the load factor would

A) remain constant regardless of air density and the resultant lift vector.

B) vary depending upon speed and air density provided the resultant lift vector varies proportionately.

C) vary depending upon the resultant lift vector.

A**4. H912 COM**

During the transition from straight-and-level flight to a climb, the angle of attack is increased and lift

A) is momentarily decreased.

B) remains the same.

C) is momentarily increased.

C**5. H912 COM**

Lift on a wing is most properly defined as the

A) force acting perpendicular to the relative wind.

B) differential pressure acting perpendicular to the chord of the wing.

C) reduced pressure resulting from a laminar flow over the upper camber of an airfoil, which acts perpendicular to the mean camber.

A**6. H912 COM**

As airspeed decreases in level flight below that speed for maximum lift/drag ratio, total drag of an airplane

A) decreases because of lower parasite drag.

B) increases because of increased induced drag.

C) increases because of increased parasite drag.

C

7. H912 COM

By changing the angle of attack of a wing, the pilot can control the airplane's

A) lift, airspeed, and drag.

B) lift, airspeed, and CG.

C) lift and airspeed, but not drag.

A

8. H914 COM

An airplane leaving ground effect will

- Require an increase in angle of attack to maintain the same lift coefficient.
- Experience an increase in induced drag and thrust required.
- Experience a decrease in stability and a nose-up change in moment.
- Produce a reduction in static source pressure and increase in indicated airspeed.

A) experience a reduction in ground friction and require a slight power reduction.

B) experience an increase in induced drag and require more thrust.

C) require a lower angle of attack to maintain the same lift coefficient.

B

9. H942 COM

What performance is characteristic of flight at maximum lift/drag ratio in a propeller-driven airplane? Maximum

A) gain in altitude over a given distance.

B) range and maximum distance glide.

C) coefficient of lift and minimum coefficient of drag.

B

10. H940 COM

Recovery from a stall in any airplane becomes more difficult when its

A) center of gravity moves forward.

B) elevator trim is adjusted nosedown.

C) center of gravity moves aft.

C

11. H917 COM

Longitudinal stability and control is concerned with an airplane's pitching motion, lateral stability and control relates to an airplane's rolling motion, and directional stability and control relates to an airplane's yawing motion. Lateral and directional stability are closely interrelated and, therefore, the two are sometimes simply referred to as lateral stability.

Longitudinal stability involves the motion of the airplane controlled by its

A) rudder.

B) elevator.

C) ailerons.

B

12. H921 COM

The need to slow an aircraft below VA is brought about by the following weather phenomenon:

A) High density altitude which increases the indicated stall speed.

B) Turbulence which causes an increase in stall speed.

C) Turbulence which causes a decrease in stall speed.

B

13. H946 COM

(Refer to figure 35.)

GIVEN:

Temperature 85 °F

Pressure altitude 6,000 ft

Weight 2,800 lb

Headwind 14 kts

Determine the approximate ground roll.

A) 742 feet.

B) 1,280 feet.

C) 1,480 feet.

14. H948 COM

(Refer to figure 2.) Select the correct statement regarding stall speeds. The airplane will stall

A) 10 knots higher in a power-on, 60° bank, with gear and flaps up, than with gear and flaps down.

A

B) 25 knots lower in a power-off, flaps-up, 60° bank, than in a power-off, flaps-down, wings-level configuration.

C) 10 knots higher in a 45° bank, power-on stall, than in a wings-level stall with flaps up.

15. H983 COM

If fuel consumption is 80 pounds per hour and groundspeed is 180 knots, how much fuel is required for an airplane to travel 460 NM?

A) 205 pounds.

A

B) 212 pounds.

C) 460 pounds.

16. H921 COM

(Refer to figure 5.) The vertical line from point D to point G is represented on the airspeed indicator by the maximum speed limit of the

A) green arc.

A

B) yellow arc.

C) white arc.

17. A150 COM

If an airplane category is listed as utility, it would mean that this airplane could be operated in which of the following maneuvers?

A) Limited acrobatics, excluding spins.

B) Any maneuver except acrobatics or spins.

C) Limited acrobatics, including spins (if approved).

C

18. I30 COM

Which is true regarding the use of airborne weather-avoidance radar for the recognition of certain weather conditions?

A) The radarscope provides no assurance of avoiding instrument weather conditions.

A

B) The avoidance of hail is assured when flying between and just clear of the most intense echoes.

C) The clear area between intense echoes indicates that visual sighting of storms can be maintained when flying between the echoes.

19. H926 COM

Which is true regarding the use of flaps during level turns?

A) The lowering of flaps increases the stall speed.

B) The raising of flaps increases the stall speed.

B

C) Raising flaps will require added forward pressure on the yoke or stick.

20. H931 COM

Which airspeed would a pilot be unable to identify by the color coding of an airspeed indicator?

A) The never-exceed speed.

B) The power-off stall speed.

C) The maneuvering speed.

C

21. H931 COM

You can always determine pressure altitude from your altimeter whether in flight or on the ground. Simply set your altimeter at the standard altimeter setting of 29.92 inches, and your altimeter indicates pressure altitude

To determine pressure altitude prior to takeoff, the altimeter should be set to

A) the current altimeter setting.

B) 29.92 inches Hg and the altimeter indication noted.

B

C) the field elevation and the pressure reading in the altimeter setting window noted.

22. L52 COM

During preflight in cold weather, crankcase breather lines should receive special attention because they are susceptible to being clogged by

A) congealed oil from the crankcase.

B) moisture from the outside air which has frozen.

C) ice from crankcase vapors that have condensed and subsequently frozen.

C

23. L52 COM

If necessary to take off from a slushy runway, the freezing of landing gear mechanisms can be minimized by

A) recycling the gear.

A

B) delaying gear retraction.

C) increasing the airspeed to VLE before retraction.

24. H928 COM

Detonation may occur at high-power settings when

A) the fuel mixture ignites instantaneously instead of burning progressively and evenly.

A

B) an excessively rich fuel mixture causes an explosive gain in power.

C) the fuel mixture is ignited too early by hot carbon deposits in the cylinder.

25. H928 COM

The mixture control can be adjusted, which

A) prevents the fuel/air combination from becoming too rich at higher altitudes.

A

B) regulates the amount of air flow through the carburetor's venturi.

C) prevents the fuel/air combination from becoming lean as the airplane climbs.

26. H928 COM

Fouling of spark plugs is more apt to occur if the aircraft

A) gains altitude with no mixture adjustment.

A

B) descends from altitude with no mixture adjustment.

C) throttle is advanced very abruptly.

27. L52 COM

Which is true regarding preheating an aircraft during cold weather operations?

A) The cabin area as well as the engine should be preheated.

A

B) The cabin area should not be preheated with portable heaters.

C) Hot air should be blown directly at the engine through the air intakes.

28. K20 COM

A detuning of engine crankshaft counterweights is a source of overstress that may be caused by

A) rapid opening and closing of the throttle.

A

B) carburetor ice forming on the throttle valve.

C) operating with an excessively rich fuel/air mixture.

29. H928 COM

In aircraft equipped with constant-speed propellers and normally-aspirated engines, which procedure should be used to avoid placing undue stress on the engine components? When power is being

A) decreased, reduce the RPM before reducing the manifold pressure.

B) increased, increase the RPM before increasing the manifold pressure.

B

C) increased or decreased, the RPM should be adjusted before the manifold pressure.

30. H928 COM

Which statement best describes the operating principle of a constant-speed propeller?

A) As throttle setting is changed by the pilot, the prop governor causes pitch angle of the propeller blades to remain unchanged.

B) A high blade angle, or increased pitch, reduces the propeller drag and allows more engine power for takeoffs.

C) The propeller control regulates the engine RPM, and in turn, the propeller RPM.

C

31. J13 COM

Who has the final authority to accept or decline any 'land and hold short' (LAHSO) clearance?

A) Airplane owner/operator.

B) ATC tower controller.

C) Pilot-in-command.

C

32. J13 COM

Land and hold short operations (LAHSO) take place at some airports with an operating control tower in order to increase the total capacity and improve the flow of traffic. LAHSO requires that a pilot not use the full length of the runway but, rather, that (s)he stop and hold short before reaching an intersecting runway, taxiway, or other specified point on the landing runway. LAHSO requires familiarity with the available landing distance (ALD) for given LAHSO combinations and with the landing performance of the aircraft. Pilots are expected to decline a land and hold short clearance if they determine that it will compromise safety.

When should pilots decline a 'land and hold short' (LAHSO) clearance?

A) If runway surface is contaminated.

B) When it will compromise safety.

C) Only when the tower controller concurs.

B

33. J13 COM

You should receive a land and hold short (LAHSO) clearance only when there is a minimum ceiling of 1,000 ft. and visibility of 3 SM. The intent of having basic VFR weather conditions is to allow pilots to maintain visual contact with other aircraft and ground vehicle operations.

What is the minimum visibility and ceiling required for a pilot to receive a 'land and hold short' clearance?

A) 3 nautical miles and 1,000 feet.

B) 3 statute miles and 1,000 feet.

C) 3 statute miles and 1,500 feet.

B

34. J05 COM

(Refer to figure 51.) While clearing an active runway, you are most likely clear of the ILS critical area when you pass which sign?

- A) Top red.
- B) Middle yellow.
- C) Bottom yellow.**

C

35. J05 COM

(Refer to figure 51.) When taxiing up to an active runway, you are likely to be clear of the ILS critical area when short of which symbol?

- A) Top red.
- B) Middle yellow.
- C) Bottom yellow.**

C

36. J05 COM

(Refer to figure 51.) Which symbol does not directly address runway incursion with other aircraft?

- A) Top red.**
- B) Middle yellow.
- C) Bottom yellow.

A

37. J05 COM

(Refer to figure 51.) The red symbol at the top would most likely be found

- A) upon exiting all runways prior to calling ground control.
- B) at an intersection where a roadway may be mistaken as a taxiway.**
- C) near the approach end of ILS runways.

B

38. J05 COM

(Refer to figure 51.) The pilot generally calls ground control after landing when the aircraft is completely clear of the runway. This is when the aircraft

- A) passes the red symbol shown at the top of the figure.
- B) is on the dashed-line side of the middle symbol.
- C) is past the solid-line side of the middle symbol.**

C

39. B08 COM

When approaching to land at an airport, without an operating control tower, in Class G airspace, the pilot should

- A) enter and fly a traffic pattern at 800 feet AGL.
- B) make all turns to the left, unless otherwise indicated.**
- C) fly a left-hand traffic pattern at 800 feet AGL.

B

40. J37 COM

(Refer to figure 53)

GIVEN:

Location -Madera Airport (MAE)

Altitude 1,000 ft AGL

Position 7 NM north of Madera (MAE)

Time 3 p.m. local

Flight visibility 1 SM

You are VFR approaching Madera Airport for a landing from the north. You

A) are in violation of the CFR's; you need 3 miles of visibility under VFR.

B) are required to descend to below 700 feet AGL to remain clear of Class E airspace and may continue for landing.

B

C) may descend to 800 feet AGL (Pattern Altitude) after entering Class E airspace and continue to the airport.

41. B08 COM

Which is true regarding flight operations in Class B airspace?

A) The pilot must receive an ATC clearance before operating an aircraft in that area.

A

B) Flight under VFR is not authorized unless the pilot in command is instrument rated.

C) Solo student pilot operations are not authorized.

42. B08 COM

Which is true regarding pilot certification requirements for operations in Class B airspace?

A) The pilot in command must hold at least a private pilot certificate with an instrument rating.

B) The pilot in command must hold at least a private pilot certificate.

B

C) Solo student pilot operations are not authorized.

43. J37 COM

When a dashed blue circle surrounds an airport on a sectional aeronautical chart, it will depict the boundary of

A) Special VFR airspace.

B) Class D airspace.

B

C) Class B airspace

44. B08 COM

Communications must be established prior to 4 nautical miles from the airport, up to and including 2,500 feet AGL

When operating an aircraft in the vicinity of an airport with an operating control tower, in Class E airspace, a pilot must establish communications prior to

- A) 5 NM, and up to and including 3,000 feet AGL.
 - B) 8 NM, and up to and including 3,000 feet AGL.
 - C) 4 NM, and up to and including 2,500 feet AGL.**
-

45. J37 COM

(Refer to figure 52, point 9) The alert area depicted within the blue lines is an area in which

- A) there is a high volume of pilot training activities or an unusual type of aerial activity, neither of which is hazardous to aircraft.**
 - B) the flight of aircraft is prohibited.
 - C) the flight of aircraft, while not prohibited, is subject to restriction.
-

A

46. J29 COM

When in the vicinity of a VOR which is being used for navigation on VFR flights, it is important to

- A) make 90° left and right turns to scan for other traffic.
 - B) exercise sustained vigilance to avoid aircraft that may be converging on the VOR from other directions.**
 - C) pass the VOR on the right side of the radial to allow room for aircraft flying in the opposite direction on the same radial.
-

B

47. L34 COM

How can you determine if another aircraft is on a collision course with your aircraft?

- A) The nose of each aircraft is pointed at the same point in space.
 - B) The other aircraft will always appear to get larger and closer at a rapid rate.
 - C) There will be no apparent relative motion between your aircraft and the other aircraft.**
-

C

48. J22 COM

To use VHF/DF facilities for assistance in locating your position, you must have an operative VHF

- A) transmitter and receiver.**
- B) transmitter and receiver, and an operative ADF receiver.
- C) transmitter and rec

A

Good luck to all friends.
Waiting for your feed Back,
Capt.Khodairi