**Cessna 172 Quizzes**

**Option 1:** **GENERAL DESCRIPTION**

1. What type of wing configuration is the CESSNA 172?

A. LOW WING

B. HIGH WING

C. MID WING

2. What is the Wingspan of CESSNA 172?

A. 36 FT 1 IN (11.00M)

B. 38 FT 1 IN (12.00M)

C. 39 FT 1 IN (11.00M)

3. Is the CESSNA 172 equipped with fixed [tricycle landing gear](https://en.wikipedia.org/wiki/Tricycle_gear)?

A. YES

B. NO

**OPTION 2: FUSELAGE**

1. Is of semi-monocoque construction. consisting of formed bulkheads, longitudinal stringers, and reinforcing channels. and skin panels.

1. FUSELAGE
2. CABIN DOOR
3. SAFETY BELTS

2. Are used to ensure baggage cannot enter the seating area during the flight.

1. SHOULDER HARNESS.
2. GLIDER TOW-HOOK.
3. CARGO TIE-DOWNS.

3. Is installed on each side of the aircraft consisting of a sheet of outer skin chemically bonded to a formed inner pan assembly.

A. CABIN DOOR WEATHERSTRIP

B. OVERHEAD WINDOW.

C. CABIN DOOR

4. These windows are one-piece, acrylic plastic panels, set in sealing strips and held in place by retaining strips.

A. OVERHEAD WINDOW.

B. MOVABLE WINDOW.

C. LATCHES.

5. This clamp is used to operate a cable assembly that drives a cable pin from the upper aft end of the cabin door into the aft upper door sill.

A. LOCK

B. LATCHES

C.SAFETY BELTS

**OPTION 3: WINGS AND EMPENNAGE**

**1**. These boots are installed to protect the leading edge from damage caused by rocks thrown back by the propeller.

1. STABILIZER ABRASION BOOTS.
2. WINGS
3. HORIZONTAL STABILIZER

2. Is a semi cantilever, semi-monocoque type, with two main spars and suitable ribs for the attachment of the skin. Skin panels are riveted to ribs. spars and stringers to complete the structure

1. FIN.
2. STABILIZER ABRASION BOOTS.
3. WINGS.

3.  Consists of a streamlined tube riveted to two end fittings for attachment at the fuselage and wing.

A. WING STRUT

B. HORIZONTAL STABILIZER.

C. FIN

4.  Is a rear spar attached to the rudder primarily of metal construction, consisting of ribs and spars covered with skin.

1. STABILIZER ABRASION BOOTS
2. FIN
3. WINGS

5. It contains a covered opening that provides access to the actuator. Hinges are located on the rear spar assembly to support the elevators.

1. STABILIZER ABRASION
2. HORIZONTAL STABILIZER.
3. WING STRUTS

**OPTION 4: LANDING GEAR. BRAKES AND HYDRAULIC SYSTEM**

**1.** Employs a handle and a ratchet mechanism connected by a cable to the linkage at the brake master cylinders. Pulling out on the handle depresses both master cylinder piston rods, and the handle ratchet locks the handle in this position until the handle is turned and released.

1. PARKING BRAKE SYSTEM.
2. TORQUE LINKS
3. NOSE WHEEL STEERING SYSTEM

**2**. What part of the CESSNA is in the picture:



1. MAIN LANDING GEAR
2. NOSE GEAR.
3. MAIN LANDING GEAR FAIRINGS

3.  Keep the lower strut aligned with the nose gear steering system, but permit shock strut action.

A. TORQUE LINKS

B. SHIMMY DAMPER.

C. BRAKE MASTER CYLINDERS

4.  Are rigid tubing, except for the flexible hose used at the brake master cylinders. A separate line is used to connect each brake master cylinder to its corresponding wheel brake cylinder.

1. NOSE GEAR
2. HYDRAULIC BRAKE LINES
3. BRAKE MASTER CYLINDERS

5 The shock strut is attached to the firewall with upper and lower strut fittings, which is accomplished by two steering tubes lining the nose gear steering collar to the rudder pedal bars.

1. NOSE WHEEL STEERING SYSTEM
2. NOSE GEAR.
3. WHEEL BRAKE ASSEMBLIES

**OPTION 5 FLIGHT CONTROL SYSTEM**

**1**. Is comprised of an electric motor and transmission assembly, drive pulleys, push-pull rods, cables, and a follow-up control. Power from the motor and transmission assembly is transmitted to the flaps by a system of drive pulleys, cables, and push-pull rods.

1. STABILIZER CONTROL SYSTEM
2. WING FLAP CONTROL SYSTEM
3. FLAPS

2.  Consists of a sheathed cable assembly. pointers and micro switches. One end of the cable is attached to the flap operating the switch operating arm. The other end is clamped to the flap direct cable, above the headliner in the rear cabin area.

1. FLAPS
2. WING FLAP CONTROL SYSTEM
3. FLAP FOLLOW-UP AND INDICATING SYSTEM

3.  Are control surfaces attached to the trailing edge of the wings, near the wingtip, that control the aircraft about its longitudinal axis allowing the aircraft to "roll" or "bank"?

A. AILERONS

B. HORIZONTAL STABITIZER.

C. WING FLAP CONTROL SYSTEM

**4**. Used to pitch the aircraft up and down by creating a load on the tail. The aircraft pitch attitude is controlled by changing the deflection of the elevator, creating a load on the tail. The elevators control the angle of attack of the wings.

1. **ELEVATORS**
2. WINGS
3. TRIM TAB

5. Are precision-engineered to combine quiet operation with a non-hydraulic, maintenance-free design. The unit is corrosion free, ensures very accurate tab positioning, and provides maximum lift force.

1. FIN.
2. TRIM TAB CONTROL WHEEL
3. TRIM TAB ACTUATOR

6. Located at the pilot's feet, control the rudder as well as aircraft steering on the ground, either directly or indirectly. Rudders may have yaw dampeners which reduce sensitivity and ease control for the pilot

A. FLIGHT CONTROL PEDALS

B. RUDDER PEDALS

C. RUDDER

7. Consists of two control wheels, one for the pilot and one for the co-pilot, attached to columns and linked by universal joints to the control "U" located behind the instrument panel. Lateral rotation of either control wheel is transmitted to the ailerons, one per wing, via a series of sprockets. chains, pulleys, cables, bell cranks, and push-pull tubes.

1. **AILERON CONTROL SYSTEM**
2. AILERON
3. RUDDER CONTROL SYSTEM

8. The force of the airflow striking the tab causes the main control surface to deflect to a position that corrects the unbalanced condition of the aircraft.  a constant task required after any power setting, airspeed, altitude, or configuration change. Proper trimming decreases pilot workload, especially important for instrument flying.

1. ELEVATOR TRIM CONTROL SYSTEM
2. TRIM TAB
3. WING STRUTS

9. Control the direction of "yaw" about an airplane's vertical axis.  \_\_\_\_\_\_\_\_are like the elevators, except that they swing in a different plane side to side instead of up and down.

A. STABILIZER ABRASION BOOTS

B. RUDDER.

C. WINGS

10. The lever assembly is mounted on the center console structure and utilizes a pin to positively lock the trim system in any of 3 positions left or right of the center of the "neutral' trim position. The lever also serves as the trim position indicator.

1. TRIM TAB CONTROL WHEEL
2. RUDDER TRIM CONTROL SYSTEM
3. ELEVATOR TRIM CONTROL SYSTEM

**OPTION 6 ENGINE**

**1**. Attaches to shock mounts, which in turn, are fastened to the fuselage. provides access to the engine oil dipstick. oil filler neck and strainer drain control.

A. ENGINE COWLING.

B. EXHAUST SYSTEM

C. ENGINE MOUNT

**2.** A Muffler is located beneath the engine. The muffler assembly is enclosed in a shroud that captures exhaust heat that is used to heat the aircraft cabin.

1. INDUCTION AIR SYSTEM
2. AIRCRAFT MAGNETOS
3. EXHAUST SYSTEM

3. Is composed of sections of steel tubing welded together and reinforced with gussets. The mount is fastened to the fuselage at four points. The engine is attached to the engine mount with shock-mount assemblies that absorb engine vibrations.

A. ENGINE MOUNT.

B. ENGINE OIL SYSTEM

C. ENGINE SHOCK-MOUNT PADS

4.  Contains a valve, operated by the carburetor heat control in the cabin. which permits air from an exhaust heated source to be selected in the event carburetor icing or filter icing should be encountered.

A. ENGINE OIL SYSTEM

B. INDUCTION AIR SYSTEM

C.STARTING SYSTEM

5.  Is comprised of dual magnetos, two spark plugs in each cylinder, an ignition wiring harness, an ignition switch mounted on the instrument panel, and required wiring between the ignition switch and magnetos.

1. A.OIL COOLER.
2. IGNITION SYSTEM.
3. STARTING SYSTEM

**OPTION 7 FUEL SYSTEM**

1. Is installed in the inboard panel of each wing that stores fuel in each tank in each tank, is provided for draining trapped water and sediment.

A. FUEL TANKS

B. FUAL VENT

C. INTEGRAL FUEL BAYS

**2.**  It is plumbed into the fuel system parallel to the engine-driven fuel pump. The \_\_\_\_\_\_\_\_\_\_ may be used as a standby in case of engine-driven fuel pump failure.

1. FUEL STRAINER.
2. AUXILIARY ELECTRIC FUEL PUMP.
3. AUXILIARY ELECTRIC FUEL PUMP

3. The fuel selector valve is located beneath the floorboard just aft and slightly to the left of the pedestal structure. A shaft links the valve to a handle mounted on the pedestal structure. The positions of the handle are labeled as:

A. On. LEFT. BOTH Off and RIGHT

B. NONE OF THE ABOVE

C. OFF. LEFT. BOTH ON and RIGHT

4 Is installed on the inboard end of the vent line inside of the fuel tank A crossover line connects the two tanks together. A tee is installed on each end of the crossover line. A separate vent line is attached to the tees. connecting the crossover line to each of the aft fuel supply lines from each fuel tank.

A. VENT VALVE

B. FUEL VENT

C. FUEL SELECTOR VALVE

5. A three-cylinder priming system is available as optional equipment. Operating the primer on this optional system delivers fuel to the intake port of each individual cylinder, it operates the primer delivers fuel to the intake port of cylinder

1. FUEL COOLER
2. PRIMING SYSTEM
3. FUEL AUXILIARY SYSTEM

**OPTION 9 UTILITY SYSTEMS**

1. Is installed in the inboard panel of each wing that stores fuel in each tank in each tank, is provided for draining trapped water and sediment.

A. FUEL TANKS

B. FUAL VENT

C. INTEGRAL FUEL BAYS

**2.**  It is plumbed into the fuel system parallel to the engine-driven fuel pump. The \_\_\_\_\_\_\_\_\_\_ may be used as a standby in case of engine-driven fuel pump failure.

1. FUEL STRAINER.
2. AUXILIARY ELECTRIC FUEL PUMP.
3. AUXILLIARY ELECTRIC FUEL PUMP

3. The fuel selector valve is located beneath the floorboard just aft and slightly to the left of the pedestal structure. A shaft links the valve to a handle mounted on the pedestal structure. The positions of the handle are labeled as:

A. On. LEFT. BOTH Off and RIGHT

B. NONE OF THE ABOVE

C. OFF. LEFT. BOTH ON and RIGHT

**OPTION 10 INSTRUMENTS AND INSTRUMENT SYSTEMS**

1. What instrument panel is shown in this picture:



A. TURN INDICATOR

B. ACCELEROMETER.

C. TRUE AIRSPEED INDICATOR

2. Conveys ram air pressure to determine an aircraft's [airspeed](https://en.wikipedia.org/wiki/Airspeed), [Mach number](https://en.wikipedia.org/wiki/Mach_number), [altitude](https://en.wikipedia.org/wiki/Altitude), and [altitude trend](https://en.wikipedia.org/wiki/Vertical_speed_indicator). static line sump is installed at the source button to collect condensation in the system.

1. INSTRUMENT PANELS
2. PITOT AND STATIC SYSTEMS.
3. PANEL ENCODING SYSTEM

3.  Is an electrically operated indicator mounted in the instrument cluster with the oil pressure gauge. Is routed from the indicator to the sending unit installed in the engine. The other lead supplies power from the bus bar to the indicator.

A. TEMPERATURE GAUGE

B. ELECTRICAL ENGINE INDICATOR

C. TEMPERATURE GAUGE SYSTEM

4. Is equipped with a conversion ring, which may be rotated until pressure altitude is aligned with outside air temperature. then airspeed indicated on the instrument is read as true airspeed on the adjustable ring.

A. VACUUM SYSTEM

B. TRUE AIRSPEED INDICATOR

C. ACCELEROMETER

5.  Used on CESSNA single-engine aircraft is a mechanical indicator driven at half crankshaft speed by a flexible shaft.  \_\_\_\_\_\_ METER will be usually found in the drive shaft. To function properly, shaft housing must be free of kinks, dents, and sharp bends. There should be no bend on a radius shorter than six inches and no bend within three inches of either terminal

1. CRANKSHAFT INDICATING METER
2. ENGINE INDICATORS-TACHOMETER.
3. ENGINE QUANTITY INDICATING METER

**OPTION 11 ELECTRICAL SYSTEM**

**1.**  The switch is an interlocking split rocker with battery mode on the right-hand side and alternator mode on the left-hand side. This arrangement allows the battery to be on the line without the alternator, however, operation of the alternator without the battery on the line is not possible.

1. **MASTER SWITCH**
2. POWER SUPPLY SWITCH.
3. ALTERNATOR SWITCH

2. A reverse polarity protection system is utilized whereby ground power must pass through an external power contactor to be connected to the bus.

A. GROUND SERVICE RECEPTACLE

B. GROUND POWER UNIT

C. RAM AIR TURBINE

3. The transmitters are designed to provide a broadcast tone that is audio modulated in a swept manner over the range of 1600 to 300 Hz in a distinct, easily recognizable distress signal for reception by search and rescue personnel and others monitoring the emergency frequencies.

A. **EMERGENCY LOCATOR TRANSMITTER**

B. BLACK BOX

C.URGENCY ACCIDENT LOCATOR

4. Battery contactor closing circuit consists of \_\_\_\_\_amp fuse, a resistor, and a diode located on the firewall fuse bracket adjacent to the battery. This serves to shunt a small charge around the battery contactor so that ground power may be used to close the contactor when the battery is too dead to energize the contactor by itself.

A. 5 AMP

B. 12 AMP

C. NONE OF THE ABOVE

5. The system consists of a belt-driven alternator, a voltage regulator/ alternator control unit, mounted on the left-hand side of the firewall, and a circuit breaker located on the instrument panel. The system is controlled by the left-hand portion of the split rocker

1. MAGNETO
2. ALTERNATOR POWER SYSTEM
3. BATTERY CONTACTOR CLOSING CIRCUIT

**OPTION 12 AIRCRAFT LIGHTING SYSTEM**

1 A white strobe light may be installed on each wing tip with the navigation lights. Strobe lights are vibration resistant and operate on the principle of a capacitor discharge into a xenon tube, producing an extremely high-intensity flash. Energy is supplied to the lights from individual power supplies mounted on each wing tip rib.

A. **ANTI-COLLISION STROBE LIGHTS.**

B. NAVIGATION LIGHTS

C. FLASHING BEACON

2. This system consists of landing and taxi lights. navigation lights, anti-collision strobe lights, and flashing beacon lights. dome. instrument flood lights and courtesy lights, control wheel map lights, compass, and radio dial lights.

A. **AIRCRAFT LIGHTING SYSTEM**

B. ELECTRICAL LIGHTING SYSTEM

C. LIGHTING REGULATOR UNIT

3. Is installed to control instrument lighting. One circuit controls the compass light. map light and instrument flood lights. The other circuit controls radio lighting. A concentric knob arrangement on a dual rheostat assembly is mounted on the instrument panel.

1. **TRANSISTORIZED LIGHT DIMMING**
2. INSTRUMENT LIGHT SYSTEM
3. COURTESY LIGHT

4. Contained within the individual units. The lights are controlled by the instrument flood light switch on the overhead console. Intensity is controlled by a rheostat located on the instrument panel.

A. **COMPASS AND RADIO DIAL LIGHTING.**

B. COURTESY LIGHTS

C. FUEL SELECTOR VALVE

D. BOTH A AND B

5. Are mounted on each wing tip and the aft end of the vertical fin tip. The lights are controlled by a rocker-type switch located on the instrument panel. A circuit breaker is installed on the panel to protect system

1. **NAVIGATION LIGHTS.**
2. ANTI-COLLISION STROBE LIGHTS
3. FLASHING BEACON