

1) What is the force that allows airplanes to overcome gravity? (Session 1)

- a) Drag
- b) Weight
- c) Thrust
- d) Lift

2) _____ is the force that enables planes to stay in the air while flying. (Session 1)

3) Explain Bernoulli's principle, Specifically speed of air moving over a wing. (Session 1)

4) What force is created when an object moves through a fluid like an aircraft moves through air? (Session 1)

- a) Weight
- b) Thrust
- c) Drag
- d) Lift

5) An airplane accelerates or increases in speed when gravity is greater than drag. If false, what is the correct answer? (Session 1)

- a) True
- b) False

6) What is the load factor of a plane that weighs 3,000 pounds and has a load of 6,400 pounds acting on it? (Load Factor= Load on plane ÷ weight of plane)
(RCA 2)

- a) 2.13
- b) 2.89
- c) 1.84
- d) 1.98

7) There are multiple factors that affect lift. What factor has the greatest effect on the magnitude of lift? (Session 2)

- a) Altitude
- b) Area
- c) Wing Thickness
- d) Alileron

8) Who was the first man to break the sound barrier? (RCA 2)

9) For an airplane to achieve lift, what must the air pressure on the top surface of the wing be in relationship to the bottom surface of the wing? (Think of the wing tester) (Session 2)

- a) Equal
- b) 4 times as much
- c) Greater than
- d) Less than

10) Because there is an equal and opposite reaction for every action, the force that opposes thrust is drag. If false, what is the correct answer? (Session 4)

a) True

b) False

11) _____ are the movable portions, or control surfaces, on a wing.
(Answer starts with an A) (Session 5)

12) Mr. Zanetti's plane uses 8 gallons of fuel per hour. It has a cruising speed of 135 mph. How many gallons of fuel would be needed for a flight of 549 miles? (RCA 5)

a) 38 Gallons

b) 33 Gallons

c) 26 Gallons

d) 36 Gallons

Match the key terms with the correct definition: (Session 5)

13) _____ Rudder

a) Wing of an airplane

14) _____ Aileron

b) Located on the edge of the wing, controls roll

15) _____ Elevator

c) Vertical blade that controls direction

16) _____ Airfoil

d) Movable horizontal piece on the tail of an airplane

17) _____ Fuselage

e) The main body of the plane