

Density Altitude

S2-11. Density altitude is a measure of how thin the air is based on what three factors?

- A. Airspeed, altitude, wind speed.
- B. Altitude, relative humidity, dewpoint
- C. Pressure altitude, air temperature, air humidity

S2-12. What effect does high density altitude have on these performance factors: power, propeller efficiency, takeoff roll, climb rate?

- A. Low, low, longer, less.
- B. High, low, shorter, less.
- C. Low, high, longer, less.

S2-13. What pressure altitude, air temperature, and relative humidity creates the highest density altitude?

- A. High, high, and high.
- B. High, high, and low.
- C. Low, low, and low.

S2-14. What creates the worst overall performance condition of these factors: weight, thrust and density altitude?

- A. Low, low, high.
- B. High, high, and high.
- C. High, low, high.

S2-15. You are at 10,000 feet pressure altitude, the outside temperature is 15 degrees C., your indicated airspeed reads 50 MPH, what is your true airspeed?

- A. 40 MPH
- B. 50 MPH
- C. 60 MPH

S2-16. You are at 8,000 feet pressure altitude, the outside temperature is 10 degrees C, your indicated airspeeds reads 30 MPH, what is your true airspeed?

- A. 30 MPH
- B. 35 MPH
- C. 40 MPH

S2-17. Your airport is at 4,700 feet, the outside temperature is 100 degrees F., what is the density altitude?

- A. 6,550 feet.
- B. 8,250 feet.
- C. 9,150 feet.

S2-18. You are planning a cross-country flight to an airport that is at 6,500 feet. It is supposed to be 80 degrees F. when you land. What will the density altitude be?

- A. 7,500 feet.
- B. 8,220 feet.
- C. 9,260 feet.

Loads

S2-19. Performance maneuvers have what effect on the aircraft?

- A. Make it get better fuel economy.
- B. Increase loads.
- C. Can stress the engine if you do not use a performance fuel.

S2-20. What is the load factor on an aircraft in unaccelerated level flight?

- A. 1 G
- B. 0 G's
- C. Any G loading during level flight.

S2-21. In a 45-degree banked turn, what is the load factor on the aircraft?

- A. 1.0 G
- B. 1.4 G's
- C. 2.0 G's

S2-22. When the load factor is increased on an aircraft, how is the stall speed affected?

- A. It goes up.
- B. It remains the same.
- C. It decreases.

S2-23. What procedures should be followed before performing any performance maneuver?

- A. Make sure your auxiliary fuel pump is on.
- B. Have adequate altitude and scan the area for other aircraft.
- C. Make sure your seatbelt is tight.

S2-24. A 60-degree banked turn increases the load on an airplane to? .

- A. 1.4 G's
- B. 2.0 G's
- C. 3.0 G's