

## PRE-SOLO KNOWLEDGE EXAM

Name: \_\_\_\_\_

Airplane Make / Model: \_\_\_\_\_

### You will need to have the following:

- 1) Federal Aviation Regulations (FAR's)
  - 2) Aeronautical Information Manual (AIM) with Pilot / Controller Glossary
  - 3) Aviation Sectional Chart
  - 4) Chart Supplement
  - 5) Airman Certification Standards for Private Pilot
  - 6) Pilot's Operating Handbook (POH) for the airplane you are training in
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- 1) Who is ultimately responsible for the operation of an aircraft and what does that responsibility entail? FAR 91.3 and FAR 1.1 (Pilot-in-Command)
  
  - 2) What personal documents must a Student Pilot carry when flying cross country? FAR 61.51 (i)(2)
  
  - 3) What is a cross country flight? FAR 61.1 (b)(3) (i) and FAR 61.1 (b)(3) (ii)
  
  - 4) What are the limitations for a student pilot carrying passengers? FAR 61.89
  
  - 5) You may not fly an airplane within \_\_\_\_\_ hours after the consumption of an alcoholic beverage or with \_\_\_\_\_ % by weight or more of alcohol in your blood. FAR 91.17

- 6)** What airplane documents must be onboard the airplane for every flight? FAR 91.9 and FAR 91.203
  
- 7)** Explain preflight action requirements necessary before flying an airplane. FAR 91.7 and FAR 91.103
  
  
  
  
  
  
  
  
  
  
- 8)** Are you allowed to fly in Restricted Airspace? Are you allowed to fly in Prohibited Airspace? FAR 91.133 and AIM 3-4-2 and 3
  
  
  
  
  
  
  
  
  
  
- 9)** How are Restricted and Prohibited airspaces depicted a Sectional Chart?
  
  
  
  
  
  
  
  
  
  
- 10)** Are all Restricted and Prohibited airspace depicted on Sectional Charts? FAR 91.139
  
  
  
  
  
  
  
  
  
  
- 11)** If you have concern over the safety of a proposed flight path, where can you go for help? AIM 4-1-3 and AIM 5-1-3
  
  
  
  
  
  
  
  
  
  
- 12)** What are the day-Visual Flight Rule (VFR) fuel requirements? FAR 91.151
  
  
  
  
  
  
  
  
  
  
- 13)** Explain the use of safety belts and shoulder harnesses for crew members? FAR 91.105

- 14) What are the basic Visual Flight Rule (VFR) weather minimums? FAR 91.155
- 15) For a student pilot, are there more restrictive visibility requirements than basic VFR visibility minimums? FAR 61.89
- 16) For a student pilot, are there more restrictive flight-above-cloud requirements than basic VFR visibility and cloud separation requirements? FAR 61.89
- 17) What are the minimum safe altitudes for the operation of an airplane? FAR 91.119
- 18) When two airplanes are approaching at right angles to each other and at the same altitude, what action should each take? FAR 91.113 (d)
- 19) When practicing performance maneuvers such as steep turns, slow flight, power-on or power-off stalls, you should do so at an altitude of at least \_\_\_\_\_ ?
- 20) List the meaning of the following ATC light gun signals: FAR 91.125

	<b>ON THE GROUND</b>	<b>IN FLIGHT</b>
Steady Green	_____	_____
Flashing Green	_____	_____
Steady Red	_____	_____
Flashing Red	_____	_____
Flashing White	_____	_____
Alternating Red & Green	_____	_____

- 21)** What is the difference between a towered and a non-towered airport? Is your training airport a towered or a non-towered airport? Pilot/Controller Glossary See-TOWER AIM 4-3-2 (a) and AIM 4-1-9 (a) through (c)
- 22)** Explain the procedures you would use to land at the training airport if your communication radios failed in flight? FAR 91.185 (b), AIM 6-4-1 and 6-4-2
- 23)** Draw the runway configuration and the major taxiway configuration of the training airport.
- 24)** What are the normal traffic patterns and traffic pattern altitudes around the training airport?
- 25)** What are the following radio frequencies at your training airport? *Write "N/A" if it doesn't apply to your training airport.*

ATIS / ASOS / AWOS: \_\_\_\_\_

Ground Control: \_\_\_\_\_

Tower: \_\_\_\_\_

Approach Control: \_\_\_\_\_

Departure Control: \_\_\_\_\_

CTAF: \_\_\_\_\_

Unicom: \_\_\_\_\_

Flight Service Station: \_\_\_\_\_

**26)**List the airspeeds and their definitions for your training airplane:

<b>AIRSPEED</b>	<b>DEFINITION</b>
Vso: _____	_____
Vs: _____	_____
Vr: _____	_____
Vx: _____	_____
Vy: _____	_____
Vfe: _____	_____
Va: _____	_____
Vno: _____	_____
Vne: _____	_____

**27)**What is the maximum ramp (gross) weight for your training airplane?

**28)**What is the maximum takeoff weight for your training airplane?

**29)** What is the maximum fuel capacity for your training airplane and how much of that capacity is usable?

**30)** What is the minimum and maximum oil capacity of your training airplane?

**31)** What is the best-glide speed for your training airplane?

**32)** When is carburetor heat recommended in your training airplane?

- 33) Explain the recommended use of flaps for a normal landing in your training airplane?
- 34) Explain the procedures you would follow if the engine failed in your training airplane, immediately after takeoff?
- 35) Explain the procedures you would follow if the engine failed in your training airplane on takeoff, after crossing the end of the runway and before you've reached 400 feet?
- 36) Explain the procedures you would follow if the engine failed in your training airplane at 3,500 feet AGL while you are flying over sparsely populated terrain?
- 37) Compute the location of the center of gravity (CG) for a solo flight with full fuel in the training airplane. Is the CG within acceptable limits?

Date Reviewed: \_\_\_\_\_

Score: \_\_\_\_\_

\_\_\_\_\_  
Student

\_\_\_\_\_  
Instructor