

**CIRRUS SR-20**

1. Total usable fuel capacity for the SR-20 is:
  - a. 60.5 gallons
  - b. 56 gallons
  - c. 54 gallons
  - d. 50 gallons
  
2. Total fuel capacity for the SR-20 is:
  - a. 60.5 gallons
  - b. 56 gallons
  - c. 54 gallons
  - d. 50 gallons
  
3. Landing approach speeds are \_\_\_\_\_ KIAS with Flaps 0%, \_\_\_\_\_ KIAS with Flaps 50%, and \_\_\_\_\_ KIAS with Flaps 100%.
  
4. Fuel for start, taxi, and runup is \_\_\_\_\_ gallon(s)
  
5. Maximum weight allowed in the baggage area is:
  - a. 100 pounds
  - b. 120 pounds
  - c. 130 pounds
  - d. None of the above
  
6. The Maximum Recommended Turbulent Air Penetration or Maneuvering speeds (KIAS) are:  
3000 pounds \_\_\_\_\_  
2600 pounds \_\_\_\_\_  
2300 pounds \_\_\_\_\_
  
7. Enter the following speeds (KIAS, sea level):  
 $V_x$  \_\_\_\_\_  $V_{NO}$  \_\_\_\_\_  
 $V_Y$  \_\_\_\_\_  $V_{NE}$  \_\_\_\_\_  
 $V_{FE}$  \_\_\_\_\_ @50% \_\_\_\_\_ @100%  $V_{GLIDE}$  \_\_\_\_\_ @3000 lbs \_\_\_\_\_ @2500 lbs

8. The Cirrus Airframe Parachute System (CAPS) recommended deployment airspeed is \_\_\_\_\_, and the maximum demonstrated deployment speed is \_\_\_\_\_ KIAS.
9. If the RPM does not respond to power lever movement, the most likely cause is:
  - a. A faulty propeller governor
  - b. An oil system malfunction
  - c. Both (a) and (b)
  - d. Power lever linkage failure
10. If low oil pressure is accompanied by a rise in oil temperature, there is a good reason to suspect:
  - a. The oil pressure gauge is inoperative
  - b. The outside air temperature is too high for the power setting
  - c. An engine failure may be imminent
  - d. The mixture is too lean
11. The flap setting for normal takeoff is:
  - a. 10 deg
  - b. Zero deg
  - c. 50%
  - d. None of the above
12. The maximum demonstrated crosswind velocity is \_\_\_\_\_ knots.
13. Normal takeoff rotation speed is \_\_\_\_\_ KIAS?
14. During the run-up magneto check, the RPM drop should not exceed \_\_\_\_\_ RPM on either magneto or greater than \_\_\_\_\_ RPM difference between magnetos.
15. Fuel BOOST should be left ON during takeoff and for climb as required for vapor suppression with hot or warm fuel.
  - a. True
  - b. False

16. Flap retraction speed on takeoff is \_\_\_\_\_ KIAS.
17. The engine is equipped with an altitude compensating fuel pump that automatically provides the proper full rich mixture. Because of this, the mixture should be set to full rich to allow the aneroid to provide auto leaning for the engine during all flight conditions.
- a. True
  - b. False
18. If additional cruise leaning beyond that provided by the aneroid is desired, Best Power can be obtained using 75% power or less at \_\_\_\_\_ deg F Rich of Peak EGT, and Best Economy can be obtained using 65% power or less at \_\_\_\_\_ deg F Lean of Peak EGT.
19. The maximum glide ratio is \_\_\_\_:\_\_\_\_, which equates to approximately:
- a. 1.5 nm per 1000 feet
  - b. 15 nm per 10,000 feet
  - c. 1.8 nm per 1000 feet
  - d. Both (a) and (b)
20. Using the wind component chart calculate the wind components for the following conditions:
- Runway 02 reported wind 060 degrees at 30 knots
- a. 23 knots headwind, 19 knots crosswind
  - b. 19 knots headwind, 23 knots crosswind
  - c. 23 knots tailwind, 19 knots crosswind
  - d. Crosswind is above the maximum demonstrated crosswind
  - e. Both (b) and (c)

21. Calculate the following takeoff ground roll:

Pressure altitude: 1000 feet  
Temp: 30 deg C  
Flaps: 50%  
Weight: 3000 pounds  
Wind: 160 degrees at 12 knots  
Runway: 20

- a. 1766
- b. 1901
- c. 1631
- d. 2306

22. Calculate the following cruise performance:

Weight: 2600 pounds  
Pressure altitude: 6000 feet  
Temp: 18 deg C @ 6000 feet (ISA+15)  
RPM: 2500  
PWR: 65%

- a. 21.8 MAP, 144 KTAS, 10.6 GPH
- b. 21.8 MAP, 142 KTAS, 10.4 GPH
- c. 22.2 MAP, 144 KTAS, 10.6 GPH
- d. 21.5 MAP, 143 KTAS, 10.5 GPH

23. Calculate the short field landing ground roll and distance over a 50 feet obstacle:

Pressure altitude: Sea Level  
Temperature: 30 degrees C  
Weight: 2900 pounds  
Wind: 020 degrees at 10 knots  
Runway: 20

- a. 1067 and 2109 feet
- b. 1067 and 3164 feet
- c. 1601 and 3164 feet
- d. 985 and 1947 feet

24. The maximum landing weight is \_\_\_\_\_ pounds. If you takeoff at maximum takeoff weight of \_\_\_\_\_ pounds, you must burn \_\_\_\_\_ gallons of fuel before your can land.

25. CAPS deployment has been demonstrated from straight and level flight as low as \_\_\_\_\_ feet AGL. From entry into a one-turn spin until under a stabilized parachute is \_\_\_\_\_ feet. It is recommended to make your decision to activate CAPS above \_\_\_\_\_ feet. After CAPS deployment the aircraft will descend at less than \_\_\_\_\_ feet per minute with a lateral speed equal to the velocity of the surface wind. The CAPS landing touchdown is equivalent to a ground impact from a height of approximately \_\_\_\_\_ feet.