Colorado Soaring Association Cross-country written exam

1.	What kind of clouds would indicate thermal lift?
2.	You would fly the best L/D when: a. Flying downwind to a potential landing site. b. Flying upwind to a potential landing site. c. Flying crosswind to a potential landing site. d. Thermaling. e. flying through thermals with no intention of stopping to circle
3.	How many statute miles will a glider with a 30:1 glide ratio at 50 mph travel for each 1000 feet of altitude loss with a 10 mph headwind? (note bene: we're looking for a rule of thumb here, not a final glide calculation that requires a computer)
4.	Rank the following landing sites in order of preference a. Newly mown hayfield b. Field with short crop (e.g. grass) c. Ploughed field d. Tall crop (e.g. corn) e. Road
5.	Our parachutes must have been packed by a certificated and appropriately rated parachute rigger within the preceding days. How do you know?
6.	On which side of a large, plowed farm field, surrounded by vegetation, should a pilot find a thermal on a sunny day?
7.	How can you determine if another aircraft is on a collision course with your aircraft?
8.	The best way to detect wires is to

- 9. Cheyenne airport is:
 - a. Class B airspace
 - b. Class C airspace
 - c. Class D airspace
 - d. Class E airspace
 - e. Class G airspace
- 10. Which type of airmass, at altitude, is most likely to produce soarable mountain wave conditions and how would you recognize it?
- 11. You are joining below a glider in a thermal. What are your actions?
- 12. Explain why ballast changes glider performance. When should ballast not be used or dumped?
- 13. Explain Dolphin flight.
- 14. What is the importance of the MacCready Setting?
- 15. What effect will "bugs" have on glider performance?
- 16. If the C.G. is adjustable(via tail ballast) Where is the best location for maximum performance? Why?
- 17. Between your current position and your next waypoint lies a line of Virga. What possible conditions might occur as you approach this area? As you approach the Virga, you encounter extreme lift, 15 knots or greater, What are the dangers of this condition?
- 18. While ridge flying with other gliders, what must you do if you intend on passing the glider in-front of you?
- 19. While most gliders use 123.30 MHz to communicate, what is the next most common frequency?
- 20. If you intend on dropping water ballast, what must you do prior to dumping and after dumping the water?
- 21. What is the danger of not keeping yourself hydrated while flying cross country?

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