Name:
Date:

Ercoupe 415-C
Pre-Solo Exam

1. How many gallons per hour does the Ercoupe burn at normal cruise?

2. What is the total Fuel Capacity (both wings) of the Ercoupe, and how many gallons are usable? Based on Question 1, what's your endurance (no reserve) in hours and minutes?

3. What is the maximum gross takeoff weight?

4. What is the Useful Load?

5. What is the maximum allowable weight for pilot, passengers and baggage (assume full fuel)?

6. What is the demonstrated cross-wind component?

7. What grade of oil is used in the Ercoupe at CHI Aerospace?

8. What is the safe operating range of engine oil, in quarts?

9. What Octane or Grade Fuel are we using in the Ercoupe?

10. What color is this fuel?

11. What is the maximum continuous operating power (RPM)?

12. Where are the fuel-sump drains located?

13. During the pre-takeoff magneto check, what is the maximum allowable drop in RPM?

14. When is it appropriate to use carburetor heat?

Does Carburetor Heat lean or enrich the mixture? Why?

Why is it required that the Carburetor Heat be closed for taxi?

15. Fill in the V-Speed definitions and corresponding values for the Ercoupe:

	Definition	Airspeed
(V_{so})		
(V_{s1})	**Stall in Specified Configuration**	**N/A**
(V_r)		
(V_x)		
(V_y)		
(V_{fe})	**Flaps Extension Speed**	**N/A**
(V_a)		
(V_{no})		
(V_{ne})		

17. What are the indicators of carburetor icing and under what conditions might you expect this occurrence?

18. Explain these three rules regarding flight as a student pilot;

Carriage of passengers:

Carriage of cargo:

Flight above cloud layers:

19. Explain the requirements for use of safety belts and shoulder harnesses.

20. According to the FARs, no person may operate an aircraft so as to create a(n)_____ __.

21. What personal documents must you have on board the aircraft, as a student pilot, during any solo flight?

22. What documents are required to be on board whenever the aircraft is in operation?

23. Who has final authority and responsibility for the safe operation of the aircraft when a student is in solo flight?

24. Describe what might be considered careless or reckless operation of an aircraft.

25. List 5 reasons to execute a Go-Around Procedure:

26. Who has the right-of-way when two aircraft are on final approach?

27. Describe the Go-Around Procedure for the Ercoupe.

28. What actions are required if you are overtaking a slower aircraft? Who has the right-of-way?

29. Who has the right-of-way when you are on the 45 entry and there is a departing airplane remaining in the pattern?

30. What happens to stall speed as angle of bank increases in level flight? What is the maximum bank angle in the pattern?

31. What are the minimum altitude requirements for flight over a congested area?

32. What are the minimum cloud clearances for flight in Class C, D & E airspaces?

33. What are the usual dimensions of Class "D" airspace?

34. What are the requirements for entering the Portsmouth (Pease) Class "D" airspace?

35. Under what conditions can a Student Pilot land at an airport, other than Portsmouth Airport?

36. What maneuvers, other than those demonstrated and authorized by your instructor, are you allowed to practice while in solo flight? What are the minimum altitudes for recovery that your instructor has set?

37. What are a few things you've been taught to do in the Ercoupe if you are slightly high on approach?

38. What is your takeoff briefing?

39. Diagram the Portsmouth Airport traffic pattern and fill in the altitude and appropriate power setting values and airspeeds for each leg.