

**PILOT** \_\_\_\_\_  
**INSTRUCTOR** \_\_\_\_\_  
**DATE** \_\_\_\_\_

**Piper PA-28R-200                      6 month quiz                      Tail: N32521                      02/15/2008**

1. Date of current aircraft weight and balance computations \_\_\_\_\_
2. Aircraft licensed empty weight: \_\_\_\_\_ lbs.
3. Licensed empty weight includes \_\_\_\_\_ gallons of unusable fuel and \_\_\_\_\_ lbs. of undrainable engine oil.
4. Maximum normal category gross weight: \_\_\_\_\_ lbs.  
Normal category useful load: \_\_\_\_\_ lbs
5. Maximum weight in baggage area: \_\_\_\_\_ lbs.
6. Full useable fuel quantity: \_\_\_\_\_ gals.
7. Maximum passenger and baggage weight with full fuel and oil: \_\_\_\_\_ lbs.
8. Tire pressures are \_\_\_\_\_ psi for the nose tire and \_\_\_\_\_ psi for the main tires.
9. System oil capacity is \_\_\_\_\_ qts. According to POH, minimum safe quantity is \_\_\_\_\_ qts. Discuss this with your instructor/check pilot.
10. How many fuel drains should be sampled during preflight? \_\_\_\_\_ .  
Where are these fuel system drains located? \_\_\_\_\_ .
11. Primary electrical power is provided by a \_\_\_\_\_ volt \_\_\_\_\_ amp alternator.  
Secondary electrical power is provided by a \_\_\_\_\_ volt \_\_\_\_\_ amp hour battery.
12. If no output is indicated on the ammeter during flight, what steps should be taken?  
\_\_\_\_\_  
\_\_\_\_\_
13. The General Specifications section of the POH predicts a takeoff ground run of 770 ft. and takeoff distance over a 50 ft. obstacle of 1600 ft. with short field effort. What conditions are assumed for these performance values? Density altitude \_\_\_\_\_ ft. Flaps \_\_\_\_\_ degrees. Rotation airspeed \_\_\_\_\_ to \_\_\_\_\_ mph. Airspeed through 50 ft. \_\_\_\_\_ mph. What is the predicted ground roll if density altitude is 3000 ft.? \_\_\_\_\_ ft.

14. What cruise true airspeed should you expect with these conditions: Weight 2650 lbs. Density altitude 4000 ft. Throttle and propeller 55% power. \_\_\_\_\_ mph. What airspeed would be expected at 75% power? \_\_\_\_\_ mph. At 4000 ft., and 2400 rpm, what throttle settings corresponds to 55 and 75% power? \_\_\_\_\_ and \_\_\_\_\_ inches.
15. What cruise range should be expected under the following conditions: Best economy. Gross weight 2650 lbs. Density altitude 4000 ft. 55% power. 45 minute reserve. \_\_\_\_\_ statute miles. What range is expected at 75% power? \_\_\_\_\_ statute miles.
16. The General Specifications section of the POH predicts a landing roll of 780 ft. and a total landing roll over a 50 ft. barrier of 1380 ft. What conditions are assumed for these values? Density altitude \_\_\_\_\_ ft. Flaps \_\_\_\_\_ degrees. Throttle \_\_\_\_\_.
17. What are the CAS values for the following airspeeds?
- |                 |                     |
|-----------------|---------------------|
| V <sub>so</sub> | _____ mph.          |
| V <sub>s</sub>  | _____               |
| V <sub>x</sub>  | _____ (gear up)     |
| V <sub>y</sub>  | _____ (gear up)     |
| V <sub>a</sub>  | _____ (at 2325 lbs) |
| V <sub>no</sub> | _____               |
| V <sub>ne</sub> | _____               |
| Takeoff rotate  | _____ to _____      |
| Best glide      | _____               |
18. The gear may be extended at \_\_\_\_\_ mph, but cannot be retracted above \_\_\_\_\_ mph.
19. What is the maximum airspeed at which flaps may be extended? \_\_\_\_\_ mph.
20. What is the recommended flap position for a normal takeoff? \_\_\_\_\_.  
 What is the recommended flap position for a short field takeoff \_\_\_\_\_.  
 What is the recommended flap position for a soft field takeoff \_\_\_\_\_.
21. Which acrobatic maneuvers are permitted in this airplane? \_\_\_\_\_.
22. a). After selecting the landing gear “down” position, the 3 green gear down lights appear to **NOT** be illuminated. What is the first item to check before determining the gear is not down and locked? \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_
- b). What is the cause of this? \_\_\_\_\_  
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 \_\_\_\_\_  
 \_\_\_\_\_

23. Should the normal landing gear extension system fail, what is the procedure for emergency extension of the landing gear?

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24. Describe the procedure for leaning to “best economy” using the Insight GEM.

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25. If “best power” is desired, how should the last step in no. 22 above be altered?

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26. The Arrow’s propeller (s/n 28R-7535065) has a limitation which requires that continuous operation between \_\_\_\_\_ and \_\_\_\_\_ rpm be avoided.

27. On takeoff, when exiting the traffic pattern, what altitude should you reach before turning crosswind? \_\_\_\_\_ ft.

28. When in the traffic pattern, the downwind leg should be flown \_\_\_\_\_ of I405.

29. At what altitude should you enter the 45° at Renton? \_\_\_\_\_ ft. Discuss with your instructor/check pilot.

30. On approach for landing, what is the minimum descent altitude over Kennydale and Talbot Hill? \_\_\_\_\_ ft.