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| **APCS Exposure Java** | **Exercises 08.01-04** | **Date:** |
| **Name:** | | **Period:** |

1. What is the single most important goal for any program?

2. What does *GUI* stand for?

3. What are the *3 cornerstones of OOP*?

4. What 2 things do *objects* store?

5. What makes objects unique?

6. Explain *encapsulation*.

7. Name 2 languages that used *subroutines*.

8. Name a language that used both *procedures* and *functions*.

9. Name a language that uses only *functions*.

10. Java encapsulates data and action modules that access the data in one container, called an \_\_\_\_\_\_\_\_\_\_\_\_.

11. Object members that perform some task are called \_\_\_\_\_\_\_\_\_\_\_\_\_.

12. Object members that store data are called \_\_\_\_\_\_\_\_\_\_\_\_\_.

13. Print the shortest possible class, called *Qwerty* that can compile.

14. Look at programs ***Java0801.java***. Why is the **CardDeck** class not declared **public**?

15. Look at program ***Java0803.java***. This program does compile and execute.

Even so, what is wrong with it?

16. What is the essence of *encapsulation*?

17. Look at program ***Java0813.java***. Why will this program not compile?

18. If a class member is declared **private**, where can it be accessed?

19. Data attributes are usually declared \_\_\_\_\_\_\_.

20. If a class member is declared **public**, where can it be accessed?

21. Methods are usually declared \_\_\_\_\_\_\_.

22. Look at the 4 *get* methods in program ***Java0805.java***.

Is it possible for any of these methods to alter the class data?

23. Java assigned default values when a new object is instantiated.

If an attribute is an **int**, what value is it assigned?

24. Refer to the previous question. If an attribute is a **String**, what value is it assigned?

25. Refer to your answers to the previous 2 questions. Do these 2 mean the same thing?

26. Look at the 4 *set* methods in program ***Java0806.java***.

Is it possible for any of these methods to alter the class data?