Practice - Chapters 6 and 7

True/False

Indicate whether the statement is true or false.

1. When a user types input into a JTextField, an event has occurred. __
2. The class JFrame contains the method add. __
3. An action event is handled by the class JFrame. __
4. To compare the values of two Integer objects for equality, we can use the method equals of the class Integer. __
5. Suppose that the following statement is included in a program.

   import static java.lang.Math.*;

   After this statement, a static method of the class Math cannot be called using the name of the class and the dot operator. __
6. A formal parameter is a variable declared in the method heading. __
7. In Java, return is a reserved word. __
8. Methods other than the main method only execute when called. __
9. Void methods never have parameters. __
10. A local identifier is an identifier that is declared within a method or block and that is visible only within that method or block. __
11. Within a method, an identifier used to name a variable in the outer block of the method can be used to name any other variable in an inner block of the method. __
12. Suppose x is an identifier declared within a class and outside of every method’s definition (block). If x is declared without the reserved word static, then it can be accessed in a static method. __
13. No two methods in the same class can have the same name. __
14. The class ActionListener contains only one method, actionPerformed. __

Multiple Choice

Identify the choice that best completes the statement or answers the question.

15. To create a window, which of the following classes has to be extended?
   a. Container    c. JButton
   b. JFrame       d. JTextField
If Shape is a class and you create a new class Circle that extends Shape, then Shape is a(n) __ and Circle is a(n) __.

16. Which word goes in the first blank in the sentence above?
   a. subclass
   b. superclass
   c. inherited class
   d. package

17. Which word goes in the second blank of the sentence above?
   a. subclass
   b. superclass
   c. method
   d. package

18. Which package will you most likely have to import in order to write a GUI program?
   a. java.awt.*
   b. java.io.*
   c. java.text.*
   d. java.net.*

19. Which method contains the code that the program executes when a specific event is generated?
   a. buttonListener
   b. GUIListener
   c. actionPerformed
   d. windowListener

20. What is the name for Java classes that are provided so that values of primitive data types can be treated as objects?
   a. interfaces
   b. extensions
   c. wrappers
   d. None of the above

21. Which of the following is NOT an actual parameter?
   a. Expressions used in a method call
   b. Variables used in a method call
   c. Variables defined in a method heading
   d. Constant values used in a method call

22. Which modifier is used to specify that a method cannot be used outside a class?
   a. public
   b. abstract
   c. static
   d. private

public static String exampleMethod(int n, char ch)

23. Based on the method heading above, what is the return type of the value returned?
   a. int
   b. char
   c. String
   d. Nothing will be returned

24. Which of the following statements about the method heading above is NOT true?
   a. The method has two parameters.
   b. The method cannot be used outside the class.
   c. exampleMethod is an identifier giving a name to this specific method.
   d. It is a value-returning method of type String.
public static int minimum(int x, int y)
{
    int smaller;
    if (x < y)
        smaller = x;
    else
        smaller = y;
    return smaller;
}

25. Which of the following is NOT part of the heading of the method above?
   a. public
   b. static
   c. minimum(int x, int y)
   d. int smaller;

26. Based on the above code, what would be the output of the statement
   
   int s = minimum(5, minimum(3, 7));

   a. 3
   b. 5
   c. 7
   d. There would be no output; this is not a valid statement.