

## Take Test: Quiz 02

### Test Information

Description

Instructions

Timed Test This test has a time limit of 45 minutes. This test will save and submit automatically when the time expires. Warnings appear when **half the time, 5 minutes, 1 minute, and 30 seconds** remain.

Multiple Attempts Not allowed. This test can only be taken once.

Force Completion Once started, this test must be completed in one sitting. Do not leave the test before clicking **Save and Submit**.

**Remaining Time: 14 minutes, 54 seconds.**

### 🚩 Question Completion Status:

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

### QUESTION 1

5 points

Saved

Floating-point literals are of type \_\_\_\_\_ by default.

- ☒ A. float
- ☐ B. double
- ☐ C. real
- ☐ D. decimal

### QUESTION 2

5 points

Saved

Which of the following statements is true?

- ☐ A. The UML models a parameter of an operation by listing the parameter name, followed by a colon and the parameter value between the parentheses after the operation name.
- ☐ B. The UML indicates an operation's return type by placing a colon and the return value after the parentheses following the operation name.
- ☒ C. UML class diagrams do not specify return types for operations that do not return values.
- ☐ D. Declaring instance variables public is known as data hiding or information hiding.

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**QUESTION 3****5 points****Saved**

Which of the following statements is true?

- ☐ A. Each object (instance) of the class shares the class's instance variables.
- ☐ B. Most instance-variable declarations are preceded with the keyword public, which is an access modifier.
- ☒ C. Variables or methods declared with access modifier private are accessible only to methods of the class in which they're declared.
- ☐ D. None of the above is true.

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**QUESTION 4****5 points****Saved**

Which of the following statements is false?

- ☒ A. Each class declaration that begins with the access modifier private must be stored in a file that has the same name as the class and ends with the .java filename extension.
- ☐ B. Every class declaration contains keyword class followed immediately by the class's name.
- ☐ C. Class, method and variable names are identifiers.
- ☐ D. An object has attributes that are implemented as instance variables and carried with it throughout its lifetime.

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**QUESTION 5****5 points****Saved**

Which of the following statements is false?

- ☐ A. Variables declared in the body of a particular method are local variables and can be used only in that method.

- ☐ B. A method's parameters are local variables of the method.
- ☐ C. Every method's body is delimited by a left and right braces ({ and }).
- ☒ D. Keyword null indicates that a method will perform a task but will not return any information.

**QUESTION 6****5 points**

Saved

Which of the following statements is false?

- ☐ A. Scanner method next reads characters until any white-space character is encountered, then returns the characters as a String.
- ☒ B. To call a method of an object, follow the object name with a comma, the method name and a set of parentheses containing the method's arguments.
- ☐ C. A class instance creation expression begins with keyword new and creates a new object.
- ☐ D. A constructor is similar to a method but is called implicitly by the new operator to initialize an object's instance variables at the time the object is created.

**QUESTION 7****5 points**

Saved

A key part of enabling the JVM to locate and call method main to begin the app's execution is the \_\_\_\_\_ keyword, which indicates that main can be called without first creating an object of the class in which the method is declared.

- ☐ A. stableb.
- ☐ B. private
- ☒ C. static
- ☐ D. public

**QUESTION 8****5 points**

Saved

Which of the following statements is true?

- ☐ A. Constructors can specify parameters and return types.
- ☒ B. Constructors can specify parameters but not return types.
- ☐ C.

Constructors cannot specify parameters but can specify return types.

- ☐ D. Constructors can specify neither parameters nor return types.

**QUESTION 9****5 points****Saved**

Which of the following statements is false?

- ☐ A. The method's return type specifies the type of data returned to a method's caller.
- ☐ B. Empty parentheses following a method name indicate that the method does not require any parameters to perform its task.
- ☐ C. When a method that specifies a return type other than void is called and completes its task, the method must return a result to its calling method.
- ☒ D. Classes often provide public methods to allow the class's clients to set or get private instance variables; the names of these methods must begin with set or get.

**QUESTION 10****5 points****Saved**

Which of the following statements is false?

- ☐ A. If a class does not define constructors, the compiler provides a default constructor with no parameters.
- ☐ B. If you declare a constructor for a class, the compiler will not create a default constructor for that class.
- ☐ C. The UML models constructors in the third compartment of a class diagram.
- ☒ D. To distinguish a constructor from a class's operations, the UML places the word "constructor" between double quotes before the constructor's name.

**QUESTION 11****5 points****Saved**

Which of the following statements is false?

- ☒ A. The javac command can compile multiple classes at once; simply list the source-code filenames after the command with each filename separated by a comma from the next.
- ☐ B. If the directory containing the app includes only one app's files, you can compile all of its classes with the command `javac *.java`.
- ☐ C. The asterisk (\*) in `javac *.java` indicates that all files in the current directory ending with the filename extension ".java" should be compiled.
- ☐ D. All of the above are true.

**QUESTION 12****5 points****Saved**

Which of the following statements is false?

- ☐ A. In the UML, each class is modeled in a class diagram as a rectangle with three compartments. The top one contains the class's name centered horizontally in boldface. The middle one contains the class's attributes, which correspond to instance variables in Java. The bottom one contains the class's operations, which correspond to methods and constructors in Java.
- ☐ B. UML represents instance variables as an attribute name, followed by a colon and the type.
- ☐ C. Private attributes are preceded by the keyword private in the UML.
- ☒ D. The UML models operations by listing the operation name followed by a set of parentheses. A plus sign (+) in front of the operation name indicates that the operation is a public.

**QUESTION 13****5 points****Saved**

Which of the following statements is true?

- ☐ A. Each object (instance) of the class shares the class's instance variables.
- ☐ B. Most instance-variable declarations are preceded with the keyword public, which is an access modifier.
- ☒ C. Variables or methods declared with access modifier private are accessible only to methods of the class in which they're declared.
- ☐ D. None of the above is true.

**QUESTION 14****5 points****Saved**

If a class does not define constructors, the compiler provides a default constructor with no parameters, and the class's instance variables are initialized to \_\_\_\_\_.

- ☐ A. zero
- ☐ B. null
- ☒ C. their default values.
- ☐ D. false

**QUESTION 15****5 points**

Saved

Which of the following statements is true?

- ☐ A. Local variables are automatically initialized..
- ☒ B. Every instance variable has a default initial value—a value provided by Java when you do not specify the instance variable's initial value.
- ☐ C. The default value for an instance variable of type String is void.
- ☐ D. The argument types in the method call must be identical to the types of the corresponding parameters in the method's declaration.