Java Review Quiz Mrs. Yarbrough AP Computer Science

Name \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date \_\_\_\_\_\_\_\_\_\_\_

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| 1. | Special software programs called \_\_\_\_ let you trace through a program to find logic errors. | |
| A) | virtual machines |
| B) | debuggers |
| C) | translators |
| D) | compilers |

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| 2. | The Java compiler ignores any text between a(n) \_\_\_\_. | |
| A) | /\* and \*/ |
| B) | / and / |
| C) | // and // |
| D) | /# and #? |

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| 3. | A(n) \_\_\_\_ contains a collection of programming instructions that describe how to carry out a particular task. | |
| A) | library |
| B) | string |
| C) | CPU |
| D) | method |

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| 4. | A(n) \_\_\_\_ is a collection of code that has been programmed and translated by someone else, ready for use in your program. | |
| A) | library |
| B) | method |
| C) | class |
| D) | parameter |
| 5. | Which of the following counts the number of characters in a string? | |
| A) | String greeting = "Hello, World!";  int n = greeting.length(); |
| B) | String greeting = "Hello, World!";  int n = greeting.count(); |
| C) | String greeting = "Hello, World!";  int n = greeting.size(); |
| D) | String greeting = "Hello, World!";  int n = greeting.number(); |

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| 6. | A method that accesses an object and returns some information about it, without changing the object, is called a(n) \_\_\_\_ method. | |
| A) | explicit |
| B) | implicit |
| C) | mutator |
| D) | accessor |

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| 7. | Which of the following terms denotes the memory location of an object? | |
| A) | implicit parameter |
| B) | Mutator method |
| C) | Object reference |
| D) | Access method |

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| 8. | Object variables store \_\_\_\_. | |
| A) | references |
| B) | numbers |
| C) | objects |
| D) | classes |

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| 9. | Which of the following statements is correct? | |
| A) | Identifiers can be made up of letters, digits, and the underscore (\_) character. |
| B) | Identifiers can use symbols such as ? or %. |
| C) | Spaces are permitted inside identifiers. |
| D) | Identifiers are not case sensitive. |

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| 10. | Which of the following statements is correct? | |
| A) | By convention, class names should start with a lowercase letter. |
| B) | By convention, variables and method names should start with an uppercase letter. |
| C) | In Java, every object belongs to a class. |
| D) | An object defines the methods for a class. |

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| 11. | Which of the following code fragments will cause an error? | |
| A) | String greeting = "Hello, Dave!"; |
| B) | PrintStream printer = System.out; |
| C) | String greeting = "Hello, World!";  int n = greeting.length(); |
| D) | int luckyNumber;  System.out.println(luckyNumber); |

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| 12. | Every method definition contains the following parts: \_\_\_\_. (Choose the best answer.) | |
| A) | the return type, the name of the method, and a list of the parameters (if any) |
| B) | an access specifier, a list of the parameters (if any), and the body of the method |
| C) | an access specifier, the return type, the name of the method, a list of the parameters (if any), and the body of the method |
| D) | an access specifier and the the return type |

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| 13. | An object stores its data in \_\_\_\_. | |
| A) | instance fields |
| B) | methods |
| C) | access specifiers |
| D) | files |

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| 14. | An instance field declaration consists of the following parts: \_\_\_\_. | |
| A) | the return type, the name of the method, and a list of the parameters (if any) |
| B) | an access specifier, the type of the instance field, and the name of the instance field |
| C) | an access specifier, a list of the parameters (if any), and the body of the method |
| D) | the type of the instance field, an access specifier, a list of the parameters (if any), and the body of the method |

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| 15. | \_\_\_\_ is the process of hiding object data and providing methods for data access. | |
| A) | Documentation |
| B) | Abstraction |
| C) | Instantiation |
| D) | Encapsulation |

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| 16. | Which of the following statements invokes the javadoc utility from a command shell? | |
| A) | javadoc \*.java; |
| B) | javadoc MyClass |
| C) | javadoc \*.java |
| D) | javadoc MyClass.java; |

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| 17. | Use of an instance field name in a method denotes the instance field of the \_\_\_\_. | |
| A) | access specifier |
| B) | implicit parameter |
| C) | parameter variable |
| D) | explicit parameter |

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| 18. | Instance fields are sometimes called \_\_\_\_. | |
| A) | garbage collectors |
| B) | parameter variables |
| C) | local variables |
| D) | instance variables |
| 19. | \_\_\_\_ indicates that a method does not return a value. | |
| A) | static |
| B) | public |
| C) | void |
| D) | private |

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| 20. | Concepts are discovered through the process of \_\_\_\_, taking away inessential features, until only the essence of the concept remains. | |
| A) | encapsulation |
| B) | abstraction |
| C) | enumeration |
| D) | interactive testing |
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| 21. | Which of the following statements converts a floating point number to an integer? | |
| A) | int f = 4.35;  int n = (int) Math.round(100 \* f); |
| B) | double f = 4.35;  int n = (int) Math.round(100 \* f); |
| C) | double f = 4.35;  int n = Math.round(100 \* f); |
| D) | double f = 4.35;  int n = (int) Math(100 \* f); |

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| 22. | Which of the following statements contains an error? | |
| A) | 1.5 \* (Math.sqrt(b \* b - 4 \* a \* c)) |
| B) | 1.5 \* (Math.sqrt(b \* b - 4 \* a \* c)) - ((b / (2 \* a))) |
| C) | 1.5 \* (Math.sqrt(b \* b - 4 \* a \* c)) - (b / (2 \* a)) |
| D) | 1.5 \* (Math.sqrt(b \* b - 4 \* a \* c))) - ((b / (2 \* a)) |

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| 23. | The decimal equivalent of 110100 is \_\_\_\_. | |
| A) | 26 |
| B) | 32 |
| C) | 52 |
| D) | 70 |

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| 24. | Which of the following statements is equivalent to *balance = balance + amount;* ? | |
| A) | balance += amount; |
| B) | balance =+ amount; |
| C) | balance == amount; |
| D) | balance +== amount; |
| 25. | An operator that combines test conditions is called a(n) \_\_\_\_. | |
| A) | compound operator |
| B) | equals operator |
| C) | complex operator |
| D) | logical operator |

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| 26. | The statement *y = x >= ? x : -x;* is similar to \_\_\_\_. | |
| A) | if ( x >= 0) y = x; |
| B) | if ( x >= 0) y = x; else y = -x; |
| C) | if ( x >= 0) y = -x; |
| D) | if ( x >= 0) y = -x; else y = x; |
| 27. | What does the following statement sequence print?  *sum = 0;*  *for(i = 1; i <= 10; i++);*  *sum = sum + 1;*  *System.out.println(sum);* | |
| A) | 6 |
| B) | 11 |
| C) | 21 |
| D) | 55 |

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| 28. | Which of the following is considered a loop with a hidden danger? | |
| A) | *for(i = 1; i <= n; i++)* |
| B) | *for (years = n; years > 0; years--)* |
| C) | *for(i = 1; i != n; i++)* |
| D) | *for (int i = 1; i <= 10; i++)*  *System.out.println(i \* i);* |
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| 29. | Based on the statement below, the angle brackets around the BankAccount type indicate that BankAccount is a(n) \_\_\_\_.  *ArrayList<BankAccount> accounts = new ArrayList<BankAccount>();* | |
| A) | wrapper class |
| B) | generic class |
| C) | primitive type |
| D) | type parameter |

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| 30. | | Based on the statement below, which of the following codes will cause an error?  *ArrayList<BankAccount> accounts = new ArrayList<BankAccount>();* | | |
| A) | *BankAccount anAccount = new BankAccount(1729);*  *accounts.set(2, anAccount);* | |
| B) | *accounts.add(new BankAccount(1015);* | |
| C) | *int i = accounts.size();*  *anAccount = accounts.get(i);* | |
| D) | *import java.util.ArrayList;* | |
| 31. | | The code below is equivalent to \_\_\_\_.  *Double d = new Double(29.95);* | | |
| A) | int d = 29.95; | |
| B) | Double d = 29.95; | |
| C) | Double d = new <Double>(29.95); | |
| D) | Double d = new ArrayList<Double>(29.95); | |
| 32. | | Arrays suffer from a significant limitation: \_\_\_\_. | | |
| A) | index values range from 0 to length + 1 | |
| B) | you cannot determine the number of elements in the array | |
| C) | you cannot copy values from one array to another | |
| D) | their length is fixed | |
| 33. | | Batch files are a feature of \_\_\_\_. | | |
| A) | Java | |
| B) | objects | |
| C) | the operating system | |
| D) | Classes | |
| 34. | | A(n) \_\_\_\_ is a program that you can use to execute another program and analyze its run-time behavior. | | |
| A) | compiler | |
| B) | debugger | |
| C) | constructor | |
| D) | Oracle | |
| 35. | | \_\_\_\_ occurs when a single class has several methods with the same name but different parameter types. | | |
| A) | Casting | |
| B) | Polymorphism | |
| C) | Overloading | |
| D) | Instantiation | |
| 36. | | The following code is an example of a(n) \_\_\_\_.  *public static int min(int a, int b, int c)*  *{*  *...*  *}*  *public static int min(int a, int b, int c, int d)*  *{*  *...*  *}* | | |
| A) | polymorphism | |
| B) | overloaded method | |
| C) | casting | |
| D) | Instantiation | |
| 37. | | Which of the following statements assigns "Harry's age is 18" to s? | | |
| A) | *int age = 18;*  *String s = "Harry's age is " + age;* | |
| B) | *int age = 18;*  *String s == "Harry's age is " + age;* | |
| C) | *int age = 18;*  *String s = 'Harry's age is ' + 18;* | |
| D) | *int age = 18;*  *String s == "Harry's age is " + 18;* | |
| 38. | | Which of the following tests whether two references are the same object? | | |
| A) | equals | |
| B) | instanceof | |
| C) | == | |
| D) | = | |
|  | | |  |  |  | | --- | --- | --- | | 39. | Inheritance is often described as the \_\_\_\_ relationship. | | | A) | UML | | B) | is-a | | C) | uses | | D) | has-a |  |  |  |  | | --- | --- | --- | | 40. | \_\_\_\_ relationships come from the collaboration columns on the CRC cards. | | | A) | Association | | B) | Aggregation | | C) | Dependency | | D) | Attribute |  |  |  |  | | --- | --- | --- | | 41. | Which of the following can be used to record the behavior of classes? | | | A) | Javadoc comments | | B) | Nouns and verbs in the problem description | | C) | Polymorphism | | D) | UML notation | | | |
| 42. | | A common programming error is a(n) \_\_\_\_: a method calling itself over and over with no end in sight. | | |
| A) | mutual recursion | |
| B) | permutation | |
| C) | infinite recursion | |
| D) | triangle number | |

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Answers

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| 1. | B |
| 2. | A |
| 3. | D |
| 4. | A |
| 5. | A |
| 6. | D |
| 7. | C |
| 8. | A |
| 9. | A |
| 10. | C |
| 11. | D |
| 12. | C |
| 13. | A |
| 14. | B |
| 15. | D |
| 16. | C |
| 17. | B |
| 18. | D |
| 19. | C |
| 20. | B |
| 21. | B |
| 22. | D |
| 23. | C |
| 24. | A |
| 25. | D |
| 26. | B |
| 27. | B |
| 28. | C |
| 29. | D |
| 30. | C |
| 31. | B |
| 32. | D |
| 33. | C |
| 34. | B |
| 35. | C |
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| 36. | B |
| 37. | A |

38. C

39. B

40. C

41. A

42. C