

Student Name \_\_\_\_\_ Group \_\_\_\_ Date \_\_\_\_\_

**Elements of the Java Programming Language**

- (1) One of the key features of Java is that it is \_\_\_\_\_ - independent.  
(a) compiler (b) user (c) bytecode (d) interpreter (e) platform
- (2) The beginning of a comment in Java can be indicated with \_\_\_\_\_ .  
(a) \*/ (b) { (c) /\* (d) \*\* (e) !
- (3) A Java program that can run inside of a Web browser is called a(n) \_\_\_\_\_ .  
(a) import (b) argument (c) applet (d) application (e) container
- (4) A Java "application" program must have a(n) \_\_\_\_\_ method.  
(a) start (b) swing (c) main() (d) package (e) import
- (5) Which of the following is NOT a legal Java identifier?  
(a) 4wheel (b) \_blank (c) miles (d) mph (e) milesPerHour
- (6) A variable of type char could be assigned the value "hi".  
(a) True (b) False
- (7) After the following statement, the value of pay is zero. `int pay = 0;`  
(a) True (b) False
- (8) The following is a legal comment:  
`double salesTax = 0.06; //sales tax for the county`  
(a) True (b) False
- (9) In the following, `hoursWorked` is an example of an "identifier."  
`double hoursWorked;`  
(a) True (b) False
- (10) Before the name of a variable can be used in a program, its name must be associated with a(n) \_\_\_\_\_ .  
(a) user (b) data type (c) number (d) quantity (e) event
- (11) `int`, `double` and `char` are called \_\_\_\_\_ types.  
(a) primitive (b) Boolean (c) real (d) simple (e) user - defined
- (12) Fill in the modifier that needs to appear to make this a constant declaration:  
`_____ int NUMBER_OF_PLAYERS = 10;`  
(a) double (b) const (c) static (d) final (e) char
- (13) In Java, classes that are related in some way can be grouped together and stored in a container called a(n) \_\_\_\_\_ .  
(a) import (b) applet (c) type (d) group (e) package
- (14) Which of the following is NOT a Java primitive type?  
(a) int (b) char (c) boolean (d) String (e) long
- (15) The expression `2 + 3 * 2 + 3 * 5` would evaluate to \_\_\_\_\_ .  
(a) 55 (b) 25 (c) 23 (d) 77 (e) 24
- (16) The expression `Math.pow(Math.pow(2, 3), 2)` would evaluate to \_\_\_\_\_ .  
(a) 12 (b) 64 (c) 1 (d) 36 (e) 16
- (17) In Java, the operator `||` means \_\_\_\_\_ .  
(a) ALWAYS (b) NOR (c) AND (d) OR (e) NOT
- (18) In Java, the operator `&&` means \_\_\_\_\_ .  
(a) ALWAYS (b) NOR (c) AND (d) OR (e) NOT

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- (19) After execution of the following four statements  
`a = 3; b = 4;`  
`a = b; b = a;`  
 the value of a would be \_\_\_\_\_ .  
 (a) 'a' (b) 3 (c) 4 (d) 6 (e) 34
- (20) After execution of the following four statements  
`a = 3; b = 4;`  
`a += b; b += a;`  
 the value of b would be \_\_\_\_\_ .  
 (a) 'a' (b) 3 (c) 4 (d) 6 (e) 11
- (21) The result of the execution of these four statements would be that x is equal to \_\_\_\_\_ .  
`x = 5;`  
`x += 8;`  
`x = 10;`  
`x += 3;`  
 (a) 8 (b) 13 (c) false (d) 16 (e) 26
- (22) The "modulus" operation is used to perform division with no remainder.  
 (a) True (b) False
- (23)  $11 \% 3$  equals \_\_\_\_\_ .  
 (a) 11 (b) 3 (c) 4 (d) 2 (e) true
- (24) The following would switch the values of `intA` and `intB`.  
`intA = intB;`  
`intB = intA;`  
 (a) True (b) False
- (25)  $3 \% 11$  equals \_\_\_\_\_ .  
 (a) 11 (b) 3 (c) 4 (d) 2 (e) true
- ```
int x, y;
if(x > 5)
  y = 1;
else if (x < 5) {
  if(x < 3)
    y = 2;
  else
    y = 3;
}
else
  y = 4;
```
- (26) Based on the code above, what is the value of `y` if `x = 5`?  
 (a) 1 (b) 2 (c) 3 (d) 4 (e) 5
- (27) Based on the code above, what is the value of `y` if `x = 6`?  
 (a) 1 (b) 2 (c) 3 (d) 4 (e) 5
- (28) Based on the code above, what is the value of `y` if `x = 3`?  
 (a) 1 (b) 2 (c) 3 (d) 4 (e) 5
- (29) Based on the code above, if the value of `y = 2`, what is a possible value of `x`?  
 (a) 2 (b) 3 (c) 4 (d) 5 (e) 6
- (30) Evaluate the following integer expression:  $35 \% 11 \% 2$   
 (a) 0 (b) 3 (c) 2 (d) 1 (e) 35