

Module 3 Quiz

LATEST SUBMISSION GRADE

100%

1. What is the value of this expression: $54 \% 10 + 6 * 3 \% 4$

1 / 1 point

- ☐ 9.9
- ☒ 6
- ☐ 9
- ☐ None of the other options
- ☐ 22

✓ **Correct**

Please review the definition of all operators and the order of operations. Recall that operations that have the same precedence are evaluated left-to-right. For more information, review lecture 2 part 2.

2. Which operator in the following expression will be evaluated first?

1 / 1 point

$2 / (1.0 + 2 * 3) - 2$

- ☐ The division / operator
- ☒ The multiplication * operator
- ☐ The subtraction - operator
- ☐ The addition + operator

✓ **Correct**

Please review the evaluation of expressions. Similar to mathematics, expression inside parentheses are evaluated first, and multiplication and division have higher precedence than addition and subtraction. Please review the material in lecture 2 part 2.

3. Overloading is a feature that allows the creation of two or more methods with the same name as long as the parameter lists are different.

1 / 1 point

- ☒ TRUE
- ☐ FALSE

✓ **Correct**

Please review the definition of overloading in lecture 6

4. Given a String object called **str**, the statement **str.toUpperCase();** will change the object to have all uppercase letters:

1 / 1 point

- ☒ FALSE
- ☐ TRUE

✓ **Correct**

Please review the slides discussing the methods of the String class and the values they return in lecture 5

5. The following string is a legal Java identifier that could be used as a variable name or a method name: **_am_I_okay**

1 / 1 point

- ☒ TRUE
- ☐ FALSE

✓ **Correct**

It is okay for an identifier to start with a letter or an underscore, it just cannot start with a digit.

6. The programmer can manually change data values from one type to another type by an operation called a type-_____

1 / 1 point

- ☒ cast
- ☐ convert
- ☐ alteration
- ☐ coercion

✓ **Correct**

Please review lecture 2 part 2 for more information.

7. 7. What is the output produced by running the program below? Read the code carefully before selecting the correct answer.

1 / 1 point

```
1 public void process() {  
2     int x = 22;  
3     out.print(x + " ");  
4     modify_x(x);  
5     out.print(x + " ");  
6 }  
7  
8 public static void modify_x (int x) {  
9     x = 99;  
10    out.print(x + " ");  
11 }
```

- ☒ 22 99 22
- ☐ 99 22 99
- ☐ 22 99 99
- ☐ 22 22 22
- ☐ 22 22 99

✓ **Correct**

The integer parameter is passed-by-value, so any changes made in the method are not seen by the caller.

8. 8. Given variable **x** of type **double**, which of the following result in a **different** value being assigned to **x**?

1 / 1 point

- ☐ They are all equivalent;
i.e. all assign the same value to **x**
- ☐ $x = 32/5.0$
- ☒ $x = (\text{double})(32/5)$
- ☐ $x = 32.0/5$
- ☐ $x = 32.0/5.0$

✓ **Correct**

If both operands are integers, then integer division is performed and any fractional part is truncated. The type cast only affects the results of the division.

9. The following code always prints the value 9:

1 / 1 point

```
int x =  
8;  
  
out.println(x++);
```

- ☐ TRUE
- ☒ FALSE

✓ **Correct**

Post-increment returns the original value of **x** after incrementing it.

10. When calling a method, the name of the actual argument (at the call site) must match the name of the formal parameter used in the method's parameter list.

1 / 1 point

- ☒ FALSE
- ☐ TRUE

✓ **Correct**

When calling a method, you only need to provide a value for each parameter. You do not need to use variables, let alone variables whose name matches the parameter name.

11. What reserved word is used to indicate that a method does not return a value?

1 / 1 point

- ☐ public
- ☐ static
- ☐ return
- ☒ void

✓ **Correct**

A method that does not return a value use the reserved word "void" to indicate that. If a method does return a value, the method header must specify the type of the returned value. Please review methods that do not return values in lecture 6.

12. A bit can have _____ different values.

1 / 1 point

- ☒ 2
- ☐ 256
- ☐ 100
- ☐ 8

✓ **Correct**

A bit is a single binary digit, as such it can only have 2 values (0 & 1). A byte is made up of 8 bits and can represent 256 different values. Please review the definition of bits and bytes in lecture 1.