

## 11th Grade User-Defined Functions Quiz

Name \_\_\_\_\_

Grade \_\_\_\_\_

### 1. What is a lambda function in programming?

- a. A function that takes in multiple inputs
- b. A named function defined with the def keyword
- c. An anonymous function defined with the lambda keyword
- d. A function that can only return strings

### 2. When might a lambda function be preferable over a regular named function?

- a. When the function needs to be reusable
- b. When the function requires a documentation string
- c. When the function is complex and lengthy
- d. When a quick throwaway function is needed

### 3. In programming, what is the main advantage of using user-defined functions?

- a. They are always built-in functions
- b. They are predefined by the programming language
- c. They allow for code reuse and modularity
- d. They cannot be called multiple times

### 4. What type of problems can lambda functions in programming help solve?

- a. Only mathematical problems
- b. Only text-based problems
- c. Applied problems in various subject areas
- d. Purely theoretical problems

### 5. How are lambda functions typically written in programming languages?

- a. Using the keyword "function"
- b. Using the keyword "lambda"
- c. Using the keyword "def"
- d. Using the keyword "return"

### 6. Which of the following is a valid example of a lambda function?

- a. `def func(x): return x * 2`
- b. `lambda x: x * 2`
- c. `function(x) { return x * 2 }`
- d. `new LambdaFunction(x => x * 2)`

**7. What is the result of a lambda function typically?**

- a. A single output value
- b. Multiple output values
- c. An error message
- d. A print statement

**8. When would one use a lambda function instead of a user-defined function?**

- a. When specifying a function with complex logic
- b. When defining a function for general reuse
- c. When writing a function with many lines of code
- d. When creating a function for a specific task

**9. How are lambda functions commonly used in higher-order functions?**

- a. As the main function
- b. As callback functions
- c. Only within loops
- d. Only as input

**10. Which of the following is a limitation of lambda functions?**

- a. They cannot accept any arguments
- b. They can only return integers
- c. They are not suitable for complex operations
- d. They can only consist of a single expression

**11. In what part of code are lambda functions often seen?**

- a. In global variables
- b. Inside loops or other functions
- c. Only at the very end of a program
- d. Only in comments

**12. What is the output of the following lambda function: `lambda x: x % 2 == 0`**

- a. Returns True if x is even, False if x is odd
- b. Returns True for any value of x
- c. Returns the square of x
- d. Returns the triple of x

**13. When solving applied problems with lambda functions, what should be considered?**

- a. Only the syntax of the function
- b. The readability and efficiency of the function
- c. The use of global variables
- d. The length of the function

**14. Which of the following best describes the use of lambda functions in programming?**

- a. Only for complex tasks
- b. For simple and quick tasks
- c. Solely for mathematical calculations
- d. Exclusively within classes

**15. How can lambda functions enhance the readability of code?**

- a. By making functions longer and more descriptive
- b. By encapsulating complex logic into a concise expression
- c. By avoiding the use of functions altogether
- d. By adding unnecessary comments to the code