ASSESSMENT 1. Increase execution time

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1. What is the primary reason to use functions in programming?

2. Reduce memory usage

3. Improve modularity and reusability

4. Increase code repetition

2. Which Java keyword is used when a function returns nothing?

1. null

2. void

3. empty

4. none

3. Which of the following follows Java's method definition syntax correctly?

1. function myFunc(int a) => a + 1

2. int myFunc(a) { return a; }

3. int myFunc(int a) { return a; }

4. myFunc(int a): return a

4. What does the DRY principle stand for?

1. Don't Rewrite Yourself

2. Do Run Yourself

3. Don't Repeat Yourself

4. Don't Reset Yourself

5. Which function definition correctly demonstrates overloading?

1. int greet() and void greet()

2. void greet (String name) and void greet ()

3. void greet (String name, String name)

4. void greet (String) and greet (String)

6. What will be the output of the following code?

```
int square(int num) {
 return num*num;
```

}

System.out.println(square(4));

1.8

2.16

3.4

4. Error

7. Which of the following is NOT a valid function name in Java?

1. calculateSum

2.2calculate

3. displayMessage

4. get_total

8. Which of the following is a built-in function in Java?

(1. System.out.println())

2. addNumbers()

3. greetUser()

4. calculateTax()

9. Which of the following statements is TRUE about functions?

1. They reduce readability

2. They prevent reuse

3. They modularize code

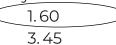
4. They increase complexity

```
10. What is the purpose of the return statement?
                                                2. To pass value back from function
      1. To print output
                                                   4. To define variables
      3. To exit a loop
11. Guess the output:
      void sayHello() {
        System.out.println("Hello!");
      sayHello();
      1. Hello!
                                                   2. Error
      3. void
                                                   4. Nothing
12. Which of the following calls a function named displayMessage with one argument?
                                                2.displayMessage("Hi");
      1. displayMessage();
                                                   4. call displayMessage("Hi")
      3. displayMessage;
13. What does the following function return?
      int add(int a, int b) {
        return a + b;
      System.out.println(add(3,7));
      1.10
                                                   2.37
      3.4
                                                   4. Error
14. What type of value does the following function return?
      double getDiscount() {
        return 0.2;
      1. int
                                                   2. float
    3. double
                                                   4. void
15. Which line will produce a compilation error?
      1. void greet() {}
                                                   2.intx = 5;
                                                   4. System.out.println(return);
      3. return x + 1;
16. What is the output of:
      String message = "Local";
      System.out.println(message);
      1. Local
                                                   2. Error
      3. "Local"
                                                   4. Null
17. In Java, where are functions defined?
      1. Outside class
                                                   2. Inside loops
      3. Inside class
                                                   4. Anywhere
```

Stemůp

18. What is method overloading?	
1. Using too many parameters	
2. Same method name, different signati	ures
3. Calling one method from another	
4. Exceeding memory	
n. Exceeding memory	
19. Which is a valid return type?	
1. word	2. nothing
3.string	4. boolean
20. A function with the same name but differen	ent parameters is:
1. Overridden	2. Overloaded
3. Recursive	4. Invalid
21. Debugthe code:	
void greet(String name) {	
System.out.println("Hello" + name)	
}	
1. Missing semicolon	2. Wrong parameter
3. Wrong method name	4. Extra braces
22. What will happen if you try to access a loca	al variable outside its function?
1. It works fine=	2. Compile-time error
3. Runtime error	4. Prints null
23. Which is true for recursive functions?	
1. They must end with a semicolon	2. They call other functions
3. They call themselves	4. They cannot return values
24. How to make functions more readable?	
1. Use single-letter names	2. Use camelCase and verbs
3. Avoid comments	4. Use long names only
25. What does 'modularity' mean in functions	3?
 One function does everything 	2. Code is reused without logic
3. Code is broken into parts	4. Using only built-in methods
26. A train travels 360 km at a uniform speed	d If the speed had been Elym/h more it
would have taken 48 minutes less. What is the	
1.35 km/h	2.40 km/h
3.45 km/h	4.50 km/h
3. 73 KI I J I I	T. 90 KITI/TI

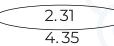
27. A and B together can complete a piece of work in 20 days. B alone can complete it in 30 days. How many days will A alone take?



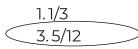
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28. The average of 5 consecutive odd numbers is 35. What is the smallest of these numbers?

3.33



29. A can do a job in 16 days, and B in 12 days. They work together for 4 days. How much work is left?



2.1/4 4.7/12

30. The average age of a group of 8 students is 22 years. If one more student joins the group, the average becomes 21. What is the age of the new student?

2.14

4.16