

# JavaScript Quiz

## Variables and Operators

1. What is the output of the following code?

```
let a = 1;
let b = 0;
while (a <= 3) {
  a++;
  b += a * 2;
}
console.log(b);
```

- (a) 10
- (b) 12
- (c) 14
- (d) 16

→ 18

2. What does the following code output?

```
let x = 0;
let y = '0';
console.log(x == y, x === y);
```

- ~~(a) true false~~
- (b) false true
- (c) true true
- (d) false false

3. Given the following code, what is the value of x after execution?

```
let x = 3;
x += (x *= 2);
```

- (a) 6
- (b) 9
- ~~(c) 12~~
- (d) 15

## Control Statements

4. What will the following code output?

```
for (let i = 0; i < 3; i++) {  
  setTimeout(() => console.log(i), 1000);  
}
```

☒ (a) 0 1 2

(b) 3 3 3

(c) 0 1 2 3

(d) undefined undefined undefined

5. What is the output of this code?

```
let x = 10;  
if (x = 5) {  
  console.log(x);  
} else {  
  console.log(x * 2);  
}
```

☒ (a) 5

(b) 10

(c) 20

(d) 0

## Loops

6. How many times will the loop execute?

```
let count = 0;  
for (let i = 1; i <= 5; i++) {  
  for (let j = i; j <= 5; j++) {  
    count++;  
  }  
}  
console.log(count);
```

(a) 5

(b) 10

☒ (c) 15

(d) 20

7. What is the output of the following code?

```
let result = '';
for (let i = 0; i < 4; i++) {
  for (let j = 0; j < i; j++) {
    result += '*';
  }
}
console.log(result);
```

- (a) \*\*\*
- (b) \*\*\*\*
- ☒ (c) \*\*\*\*\*
- (d) \*\*\*\*\*

## Functions

8. What will be logged to the console?

```
function foo(a, b = 4, c = 8) {
  return a + b + c;
}
console.log(foo(2));
```

- ☒ (a) 14
- (b) 10
- (c) 6
- (d) 2

9. What is the output of this code?

```
(function(x) {
  return (function(y) {
    console.log(x);
  })(2);
})(1);
```

- (a) 1
- (b) 2
- (c) undefined
- (d) ReferenceError

## Objects

10. What will the following code output?

```
const person = {  
  name: 'John',  
  greet: function() {  
    console.log(this.name);  
  }  
};  
const greet = person.greet;  
greet();
```

- (a) John
- ☒ (b) undefined
- (c) ReferenceError
- (d) null

11. What is the output of this code?

```
const obj = {  
  a: 1,  
  b: {  
    c: 2,  
    d: 3  
  }  
};  
const { a, b: { c } } = obj;  
console.log(a, c);
```

- ☒ (a) 1 2
- (b) 1 3
- (c) undefined 2
- (d) undefined 3

## Arrays

12. What will the following code output?

```
const arr = [1, 2, 3, 4];  
const result = arr.reduce((acc, val) => acc + val, 0);  
console.log(result);
```

- (a) 10

- (b) 9
- (c) 8
- (d) 7

13. What is the output of this code?

```
const arr = [1, 2, 3];  
arr[10] = 99;  
console.log(arr.length);
```

- (a) 3
- (b) 4
- ☒ (c) 11
- (d) 10

## DOM

14. What will the following code output?

```
document.body.innerHTML = '<div id="test">Hello</div>';  
const el = document.getElementById('test');  
console.log(el.textContent);
```

- ☒ (a) Hello
- (b) undefined
- (c) null
- (d) ReferenceError

15. How can you select all elements with the class name 'item'?

- (a) document.querySelector('.item')
- ☒ (b) document.querySelectorAll('.item')
- (c) document.getElementsByClassName('item')
- (d) Both b and c

16. What does the following code output?

```
let a = [1, 2, 3];  
let b = [1, 2, 3];  
console.log(a == b, a === b);
```

- (a) true true
- ☒ (b) false false

- (c) true false
- (d) false true

17. What will be the result of this code?

```
function test () {  
  console.log(a);  
  console.log(foo());  
  var a = 1;  
  function foo () {  
    return 2;  
  }  
}  
test();
```

- (a) undefined, 2
- (b) ReferenceError, 2
- (c) undefined, undefined
- (d) 1, 2

18. What does the following code output?

```
const a = {};  
const b = { key: 'b' };  
const c = { key: 'c' };  
a[b] = 123;  
a[c] = 456;  
console.log(a[b]);
```

- (a) 123
- ☒ (b) 456
- (c) undefined
- (d) TypeError

19. What will the following code output?

```
let x = [1, 2, 3];  
let y = x;  
x = [4, 5, 6];  
console.log(y);
```

- (a) [1, 2, 3]
- ☒ (b) [4, 5, 6]
- (c) undefined

(d) TypeError

20. What will the following code output?

```
const obj1 = { key: 'value' };  
const obj2 = obj1;  
obj2.key = 'newValue';  
console.log(obj1.key);
```

(a) value

☒ (b) newValue

(c) undefined

(d) TypeError