

Self-Assessment Quiz – Arrays

1. What is the correct syntax to create an empty array in JavaScript?

- `array[]`
- `array()`
- `[]`
- `()`

Explanation: `[]`. This is the shorthand syntax to create an empty array in JavaScript.

2. Which method is used to add elements to the end of an array in JavaScript?

- **`push()`**
- `pop()`
- `concat()`
- `slice()`

Explanation: The `push()` method allows you to add one or more elements to the end of an array.

3. How do you access the first element in an array?

- **`array[0]`**
- `array[1]`
- `array[first]`
- `array.first`

Explanation: In JavaScript, array indexes start from 0, so the first element can be accessed using `array[0]`.

4. Which method is used to remove the last element from an array in JavaScript?

- **`pop()`**
- `shift()`
- `splice()`
- `slice()`

Explanation: The `pop()` method removes the last element from an array and returns that element.

5. What is the result of the following code snippet?

```
var array = [1, 2, 3];  
console.log(array.length);
```

- 1
- 2
- 3
- 4

Explanation: The length property of an array returns the number of elements in the array, so in this case, it will be 3.

6. Which method is used to find the index of a specified element in an array?

- **indexOf()**
- includes()
- findIndex()
- search()

Explanation: The `indexOf()` method returns the first index at which a given element can be found in the array.

7. True or False: Arrays in JavaScript can store elements of different data types.

- **True**
- False

Explanation: Arrays in JavaScript can store elements of different data types, including numbers, strings, objects, and even other arrays.

8. True or False: The length of an array in JavaScript is fixed and cannot be changed once the array is created.

- True
- **False**

Explanation: The length of an array in JavaScript is not fixed and can be changed by adding or removing elements using various array methods like `push()`, `pop()`, `splice()`, etc.