

1. forEach():

The `forEach` method is useful for iterating over array elements and performing operations on them. It provides a simple and readable way to process each element in an array without the need for managing loop counters explicitly.

Example:

```
const numbers = [1, 2, 3, 4, 5];
const doubledNumbers = [];

numbers.forEach((number) => {
  doubledNumbers.push(number * 2);
});

console.log(doubledNumbers);
```

Output: [2, 4, 6, 8, 10]

2. Array.from():

It creates a new, shallow-copied array instance from an array-like or iterable object, say string.

Example:

```
const str = 'hello';
const arr = Array.from(str);
console.log(arr);
```

Output: ['h', 'e', 'l', 'l', 'o']

3. map():

It creates a new array populated with the results of calling a provided function on every element in the calling array.

Example:

```
const numbers = [1, 2, 3, 4];
const doubled = numbers.map(x => x * 2);
```

```
console.log(doubled);
```

Output: [2, 4, 6, 8]

4. filter():

It creates a new array with all elements that pass the test implemented by the provided function.

Example:

```
const numbers = [1, 2, 3, 4, 5, 6];  
const evenNumbers = numbers.filter(x => x % 2 === 0);  
console.log(evenNumbers);
```

Output: [2, 4, 6]

5. reduce():

It executes a reducer function (that you provide) on each element of the array, resulting in a single output value.

Example:

```
const numbers = [1, 2, 3, 4, 5];  
  
const sum = numbers.reduce((acc, x) => acc + x, 0);  
  
console.log(sum);
```

Output: 15

Explanation:

Here `acc` is used to store the sum of the array and it's default value is set to 0.
`x` is each element of the array.

Factorial of a number (Done by me):

```
let arr = [1,2,3,4,5];
```

```
let prod = arr.reduce(function(acc, x){  
  return acc*x;  
}, 1);  
  
console.log(prod);
```

Above code can also be written as:

```
let arr = [1,2,3,4,5];  
  
let prod = arr.reduce((acc, x) => acc*x, 1);  
  
console.log(prod);
```

Output: 120