Map practice questions

Here are **10 JavaScript `map()` practice questions** — **2 Easy, 4 Medium, 4 Hard** — all with **clear, beginner-friendly solutions**.

✅ EASY LEVEL (2)

1. Double each number

Question:
Given an array:

`[1, 2, 3, 4]`

Use `map()` to return a new array with each number doubled.

✔️ Solution:

```js
const arr = [1, 2, 3, 4];
const doubled = arr.map(num => num * 2);
console.log(doubled); // [2, 4, 6, 8]
```

2. Convert numbers to strings

Question:
Convert every number in:

`[10, 20, 30]`

into a **string**.

✔️ Solution:

```js
const arr = [10, 20, 30];
const strings = arr.map(num => String(num));
console.log(strings); // ["10", "20", "30"]
```

✅ MEDIUM LEVEL (4)

3. Extract user names

Question:
From the array:

```js
const users = [
  { name: "Vipul", age: 31 },
  { name: "Rohan", age: 25 }
];
```

Return an array containing only names.

✔️ Solution:

```js
const names = users.map(user => user.name);
console.log(names); // ["Vipul", "Rohan"]
```

4. Add 10 to marks

Question:
Given:

```js
const marks = [40, 50, 60, 70];
```

Return new array where each mark is increased by **10**.

✔️ Solution:

```js
const updated = marks.map(m => m + 10);
console.log(updated); // [50, 60, 70, 80]
```

5. Convert array of strings to lengths

Question:
Convert:
["apple", "banana", "kiwi"]
into:
[5, 6, 4] (their lengths)

✔️ Solution:

```js
const fruits = ["apple", "banana", "kiwi"];
const lengths = fruits.map(f => f.length);
console.log(lengths); // [5, 6, 4]
```

6. Convert temperatures from °C to °F

Formula:

F = C * 1.8 + 32

Array:

[0, 10, 20, 30]

✔️ Solution:

```js
const cel = [0, 10, 20, 30];
const far = cel.map(c => c * 1.8 + 32);
console.log(far); // [32, 50, 68, 86]
```

✅ HARD LEVEL (4)

7. Add a new property to each object

Question:

Input:

```js
const users = [
  { name: "Vipul", age: 31 },
  { name: "Arun", age: 28 }
];
```

Add a new property **"isAdult": true or false** based on age ≥ 18.

✔️ Solution:

```js
const result = users.map(u => ({
  ...u,
  isAdult: u.age >= 18
}));

console.log(result);
/*
[
  { name: "Vipul", age: 31, isAdult: true },
  { name: "Arun", age: 28, isAdult: true }
]
*/
```

8. Format objects into strings

Question:
Input:

```js
const products = [
  { item: "Pen", price: 10 },
  { item: "Notebook", price: 40 }
];
```

Output:

["Pen costs 10", "Notebook costs 40"]

✔️ Solution:

```js
const formatted = products.map(p => `${p.item} costs ${p.price}`);
console.log(formatted);
```

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9. Use map with index

Question:
Given:

["a", "b", "c"]

Return:

["0:a", "1:b", "2:c"]

✔️ Solution:

```js
const arr = ["a", "b", "c"];
const newArr = arr.map((item, index) => `${index}:${item}`);
console.log(newArr); // ["0:a", "1:b", "2:c"]
```

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10. Transform nested array values

Question:
Given:

```js
const numbers = [
  [1, 2],
  [3, 4],
  [5, 6]
];
```

Return a new array where each inner array's values are doubled:

[[2, 4], [6, 8], [10, 12]]

✔️ Solution:

```js
const numbers = [
  [1, 2],
  [3, 4],
  [5, 6]
];

const doubled = numbers.map(inner => inner.map(num => num * 2));
console.log(doubled);
```

If you want, I can also provide:

✅ **filter practice questions**

✅ **reduce practice questions**

✅ **mix of all array methods**

✅ **DSA-level array problems (LeetCode style)**