# Array Method Exam

**Question**

**You have an array of objects representing products in an online store. Each object has the following structure**

{
  id: number,
  name: string,
  price: number,
  inStock: boolean
}

**Your goal is to perform the following tasks using various array methods:**

1. Remove the first product from the array using the **shift** method.
2. Add a new product to the beginning of the array using the **unshift** method. The new product should have the following details:
    ◦ id: 101
    ◦ name: "New Product"
    ◦ price: 19.99
    ◦ inStock: true
3. Find a product in the array with an **id** of 42 using the **find** method. Assign the found product to a variable called **foundProduct**.
4. Create a new array called **inStockProducts** using the **filter** method. This array should only contain products that are currently in stock (i.e., where **inStock** is **true**).
5. Calculate the total price of all products in the original array using the **reduce** method. Assign the result to a variable called **totalPrice**.

## Instructions:

Please write JavaScript code to accomplish the tasks described above using the specified array methods. You can assume that the original array of products is named products.

## Template Code:

```javascript
// Initial array of products
const products = [
  {
    id: 1,
    name: "Product A",
    price: 29.99,
    inStock: true
  },
  {
    id: 42,
    name: "Product B",
    price: 49.99,
    inStock: false
  },
  {
    id: 73,
    name: "Product C",
    price: 19.99,
    inStock: true
  }
];

// Your code here

// Task 1: Remove the first product using shift method

// Task 2: Add a new product to the beginning using unshift method

// Task 3: Find a product with id 42 using find method

// Task 4: Create a new array of in-stock products using filter method

// Task 5: Calculate the total price of all products using reduce method

// Output or display the results as needed
```