Which of the following is true about the map() method in JavaScript.

- The map() method returns a new array.
  - When using the map() method, you will need to define a new variable, as it always returns a new array.
- The map() method is useful for handling third party data.
  - Using the map() method in JavaScript to display data fetched from a third party or external provider differently in your app is a common use case of the map() method.
- The map() method is a transformation operation.
  - The map() method in JavaScript is used to transform lists of data.

When you are working with lists in JSX, you can return a React component. What is the purpose of curly braces in this process?

- To access the content of the variable that represents your list item.
  - When a JSX transformation will be part of the render method of components, you need to use curly braces to wrap your dynamic data so it can be accessed.

Which of the following statements about keys in React are true? Select all that apply.

- Keys instruct React about whether a specific element's internal state should be preserved or not.
  - Amongst other things, keys instruct React on whether a specific element's internal state should be preserved when updates happen.
- Keys help React determine which items have changed, are added or are removed.
  - Keys are identifiers that help React determine which items have changed, are added or are removed.
- Keys instruct React how to treat a specific element when an update occurs.
  - Amongst other things, keys instruct React on how to treat a specific element when updates happen.

True or false: It is recommended to use item indexes as keys when selecting keys for rendered list items.

False, although item indexes can be used as keys, using indexes as keys can create problems if the order of your list of items is prone to change and can negatively affect performance. Using unique and stable identifiers, such as item IDs, is recommended instead.

You are using controlled components in React in order to have more control over the forms in an application you are creating. Which of the following props is used to perform state delegation?

Value.

State delegation is performed via the value prop. A combination of local state and the value prop is needed to create a controlled component.

Imagine you'd like to better control the submission of a form you're creating for an app. Which prop is required to prevent the default behavior of the form submit event in React?

preventDefault. To avoid the default form behavior of submitting in React, you must use the event property and call preventDefault.

What are the two props you need to add when creating a controlled range component?

value and onChange.

The value prop is used to hook the local state up and onChange prop is used to receive the changes and update the state accordingly.

Which of the following statements are true about state in React? Select all that apply.

- State is managed within the component.
  - State is managed within the component, whereas props get passed to the component.
- Attributes a component needs to change at some point in time should be part of its state.
  - If a component needs to alter one of its attributes at some point in time, that attribute should be part of its state, otherwise, it should be a prop for that component.
- State is a plain JavaScript object that React uses to hold information.
  - State and props are both plain JavaScript or JS objects that React uses to hold information.

Which of the following is true about the Context API? Select all that apply.

- Context should be used when you need to share global data.
  - Context is useful for global state. It is the right tool when you need to share data that can be considered global for a tree of React components.
- Context was introduced by React as a way to resolve the props drilling problem.
  - React solved the problem of parent components having to drill down props all the way to the children that need to consume them by introducing the Context API.