# Randomly Selected Questions - Set 4

**Question 1 (ID: 2.5.9):** Multiple Choice: What is the default box-sizing property value in CSS?  
 - (A) border-box  
 - (B) padding-box  
 - (C) content-box  
 - (D) margin-box

**Question 2 (ID: 4.3.7):** Multiple Choice: What does the `label` element do in a form?  
  
- (A) It adds descriptive text to a form field.  
- (B) It validates the input data.  
- (C) It adds styling to a form field.  
- (D) It hides the form field.

**Question 3 (ID: 1.6.10):** True/False: The <li> element can be used outside of <ul> or <ol> elements.

**Question 4 (ID: 4.8.3):** Multi-Select: Which of the following are valid methods for modifying the DOM structure? (Select all that apply)  
  
- (A) `appendChild()`  
- (B) `insertBefore()`  
- (C) `removeChild()`  
- (D) `createTextNode()`

**Question 5 (ID: 2.2.1):** Multiple Choice: Which selector is used to apply styles to elements with a specific class?  
 - (A) #  
 - (B) .  
 - (C) :  
 - (D) \*

**Question 6 (ID: 4.11.7):** Multi-Select: Which of the following are ways to ensure a user enters valid input in a form field? (Select all that apply)  
  
(A) Using the pattern attribute with a regular expression  
(B) Using JavaScript to validate input during the input event  
(C) Using the min and max attributes for numerical input  
(D) Using CSS to highlight invalid fields

**Question 7 (ID: 4.10.7):** Multi-Select: Which of the following are valid ways to modify an element's style in JavaScript? (Select all that apply)  
  
- (A) `element.style.width = "100px"`  
- (B) `element.style.setProperty("color", "blue")`  
- (C) `element.style.removeProperty("height")`  
- (D) `element.style.getElementById("width")`

**Question 8 (ID: 1.5.9):** Multiple Choice: How does the browser handle an <img> tag with conflicting width and height attributes that distort the image's natural aspect ratio?  
 - (A) The image is displayed with the specified dimensions, possibly distorted.  
 - (B) The browser adjusts the dimensions to maintain the aspect ratio.  
 - (C) The image fails to load.  
 - (D) The browser ignores the height attribute.

**Question 9 (ID: 1.8.6):** Multiple Choice: What does it mean if an element is described as an "inline" element?  
 - (A) It occupies the full width of its parent container.  
 - (B) It does not start on a new line and only takes up as much width as necessary.  
 - (C) It cannot contain other elements.  
 - (D) It is always hidden from view.

**Question 10 (ID: 2.4.10):** Multiple Choice: Which of the following is a generic family name in CSS?  
 - (A) Arial  
 - (B) sans-serif  
 - (C) Georgia  
 - (D) Garamond

**Question 11 (ID: 1.4.4):** Multiple Choice: Which of the following is a proper use of HTML comments?  
 - (A) To execute a JavaScript function conditionally  
 - (B) To leave notes for other developers within the code  
 - (C) To create a hidden text field in a form  
 - (D) To style elements differently based on the comment

**Question 12 (ID: 4.5.10):** Multi-Select: Which of the following CSS properties can be applied to improve the usability of input fields in a form? (Select all that apply)  
  
- (A) padding  
- (B) border  
- (C) width  
- (D) height

**Question 13 (ID: 3.6.5):** Multiple Choice: What is the value of `result` in the following code?  
  
function multiply(x, y) {  
 return x \* y;  
}  
let result = multiply(4, 5);  
console.log(result);  
  
- (A) 20  
- (B) 9  
- (C) NaN  
- (D) undefined

**Question 14 (ID: 3.10.9):** Multiple Choice: How do you check if an object contains a specific key?  
  
- (A) if (object.key !== undefined)  
- (B) if (key in object)  
- (C) if (Object.hasKey(object, key))  
- (D) if (object.includes(key))

**Question 15 (ID: 4.6.8):** Multiple Choice: Which property of the window object can be used to get the current URL of a webpage?  
  
- (A) window.location.href  
- (B) window.url  
- (C) window.currentURL  
- (D) window.pageURL

**Question 16 (ID: 4.8.9):** Multiple Choice: Which method is used to insert a node before another node in the DOM?  
  
- (A) `removeChild()`  
- (B) `appendChild()`  
- (C) `insertBefore()`  
- (D) `createElement()`

**Question 17 (ID: 4.3.2):** Multiple Choice: What is the default method used if the `method` attribute is not specified in a form?  
  
- (A) POST  
- (B) GET  
- (C) PUT  
- (D) DELETE

**Question 18 (ID: 3.11.4):** Multiple Choice: What will be the output of this code?  
  
let sentence = "I love programming!";  
console.log(sentence.indexOf("love"));  
  
- (A) 0  
- (B) 2  
- (C) 5  
- (D) -1

**Question 19 (ID: 2.1.5):** Multiple Choice: What is the default behavior when multiple styles are applied to an element?  
 - (A) The first style in the HTML file is applied.  
 - (B) All styles are combined and applied.  
 - (C) The most specific style according to CSS specificity rules is applied.  
 - (D) The last style in the CSS file is applied.

**Question 20 (ID: 4.8.5):** Multiple Choice: What happens when you call `removeChild()` on a DOM node?  
  
- (A) It moves the child node to another parent.  
- (B) It deletes the child node from the DOM.  
- (C) It hides the child node without removing it.  
- (D) It duplicates the child node.

**Question 21 (ID: 2.7.3):** Multiple Choice: What is the default value of the `flex-direction` property in CSS?  
 - (A) `column`  
 - (B) `row`  
 - (C) `column-reverse`  
 - (D) `row-reverse`

**Question 22 (ID: 4.9.8):** Multiple Choice: What does the `preventDefault()` method do in an event handler?  
  
- (A) It prevents the browser's default action for the event.  
- (B) It removes the event listener from the DOM.  
- (C) It triggers a default action for the event.  
- (D) It logs the event to the console.

**Question 23 (ID: 2.7.9):** Multiple Choice: What is the purpose of `flex-basis` in CSS?  
 - (A) To specify the maximum size of a flex item  
 - (B) To specify the initial size of a flex item before any space distribution  
 - (C) To shrink items based on container size  
 - (D) To control the flex direction of the container

**Question 24 (ID: 4.2.10):** Multiple Choice: Which of the following regex patterns would match "cat", "bat", and "mat"?  
  
- (A) /c|b|m/  
- (B) /cat|bat|mat/  
- (C) /c(b|m)at/  
- (D) /(c|b|m)at/

**Question 25 (ID: 2.7.2):** Multiple Choice: In a flex container, how do you align the items along the main axis?  
 - (A) `align-items`  
 - (B) `justify-content`  
 - (C) `align-content`  
 - (D) `flex-direction`

**Question 26 (ID: 4.2.8):** Multiple Choice: What will the regex `/^ab/` match?  
  
- (A) Any string containing "ab".  
- (B) A string starting with "ab".  
- (C) A string ending with "ab".  
- (D) A string where "ab" appears anywhere.

**Question 27 (ID: 4.11.1):** Multiple Choice: What is the purpose of form data validation in web development?  
  
- (A) To check that the user input is in the correct format before submitting it to the server.  
- (B) To automatically correct invalid user input.  
- (C) To prevent the form from being submitted if the server is down.  
- (D) To allow users to bypass filling out the form.

**Question 28 (ID: 1.5.1):** Multiple Choice: What is the purpose of the 'alt' attribute in an <img> tag?  
 - (A) To provide a caption for the image  
 - (B) To display an alternative text description if the image cannot be loaded  
 - (C) To increase the image size  
 - (D) To link to another webpage

**Question 29 (ID: 2.5.2):** Multiple Choice: Which property directly affects the spacing between the content of a box and its border?  
 - (A) margin  
 - (B) border  
 - (C) padding  
 - (D) width

**Question 30 (ID: 3.1.10):** Multiple Choice: What is dynamic typing in JavaScript?  
- (A) Variables must be declared with a specific data type  
- (B) Variables can change type depending on the assigned value  
- (C) JavaScript automatically converts variables into strings  
- (D) Variables cannot be reassigned once declared

**Question 31 (ID: 4.9.2):** Multiple Choice: What is event-driven programming?  
  
- (A) Programming that responds only to events triggered by the user  
- (B) A programming style where code runs in response to events  
- (C) A method to organize JavaScript files  
- (D) A way to trigger events automatically without user interaction

**Question 32 (ID: 4.1.9):** Multiple Choice: What does the `setFullYear()` method do in JavaScript?  
  
- (A) Sets the year for the `Date` object to a 2-digit year.  
- (B) Sets the year for the `Date` object to a 4-digit year.  
- (C) Sets the year, month, and date for the `Date` object.  
- (D) It doesn't exist in JavaScript.

**Question 33 (ID: 2.2.5):** Multiple Choice: Which selector would you use to style all <p> elements within a <div>?  
 - (A) div p  
 - (B) div + p  
 - (C) div > p  
 - (D) p div

**Question 34 (ID: 3.8.5):** Multiple Choice: What happens when you try to access an element in an array at an index that doesn’t exist?  
  
(A) It throws an error.  
(B) It returns undefined.  
(C) It returns null.  
(D) It crashes the program.

**Question 35 (ID: 2.4.8):** Multiple Choice: If a specific font in a font-family list is not available, what happens?  
 - (A) The browser hides the text  
 - (B) The browser chooses the next available font in the list  
 - (C) The text is displayed using the default browser font  
 - (D) The browser downloads the font from the internet

**Question 36 (ID: 3.9.3):** Multi-Select: Which of the following methods can be used to access object properties? (Select all that apply)  
  
(A) Dot notation  
(B) Bracket notation  
(C) Object.keys()  
(D) Object.getOwnPropertyNames()

**Question 37 (ID: 3.3.2):** Multiple Choice: What is the final value of `fee` in the following code?  
let fee = 30; let age = 12; if (age < 18) { fee -= 5; } if (age < 5) { fee = 0; } console.log(fee);  
- (A) 30  
- (B) 25  
- (C) 0  
- (D) 5

**Question 38 (ID: 4.1.6):** Multiple Choice: Which of the following methods gets the full year from a `Date` object?  
  
- (A) `getYear()`  
- (B) `getFullYear()`  
- (C) `getDate()`  
- (D) `getMonth()`

**Question 39 (ID: 1.7.10):** True/False: Relative URLs cannot be used within the `<a>` element to link to resources within the same site.

**Question 40 (ID: 4.8.1):** Multiple Choice: What does the `parentNode` property do in the DOM?  
  
- (A) It returns the parent node of the current node.  
- (B) It adds a new parent node to the current node.  
- (C) It removes the parent node of the current node.  
- (D) It replaces the parent node of the current node.

**Question 41 (ID: 2.2.10):** Multiple Choice: How do you select all elements that are the direct children of a <div> element?  
 - (A) div > \*  
 - (B) div + \*  
 - (C) div \*  
 - (D) div ~ \*

**Question 42 (ID: 3.1.4):** Multi-Select: Which of the following are valid JavaScript variable declarations? (Select all that apply)  
 - (A) let score;  
 - (B) int count;  
 - (C) const PI = 3.14;  
 - (D) var name = "Alice";

**Question 43 (ID: 3.4.8):** Multiple Choice: In the following switch statement, what will be the value of `coin`?  
let change = 10;   
switch (change) {   
 case 1: coin = "penny";   
 break;   
 case 5: coin = "nickel";   
 break;   
 case 10: coin = "dime";   
 break;  
 case 25: coin = "quarter";   
 break;   
 default: coin = "unknown"; }   
 console.log(coin);  
  
- (A) "penny"  
- (B) "nickel"  
- (C) "dime"  
- (D) "unknown"

**Question 44 (ID: 3.9.6):** Multiple Choice: What is the output of this code?  
  
javascript  
Copy code  
let book = {  
 title: "Quiet",  
 author: {  
 firstName: "Susan",  
 lastName: "Cain"  
 },  
 getAuthorName: function() {  
 return this.author.firstName + " " + this.author.lastName;  
 }  
};  
console.log(book.getAuthorName());  
(A) Susan Cain  
(B) Quiet  
(C) undefined  
(D) Error

**Question 45 (ID: 2.4.5):** Multiple Choice: What is the default size of the font-size property if not specified?  
 - (A) 16px  
 - (B) 12px  
 - (C) 10px  
 - (D) 14px

**Question 46 (ID: 2.3.5):** Multiple Choice: What does setting `background-color` to `transparent` do?  
 - (A) Makes the element's background fully opaque  
 - (B) Makes the element's background solid without transparency  
 - (C) Allows the background of underlying elements to be visible  
 - (D) Hides the element completely from view

**Question 47 (ID: 4.1.7):** Multiple Choice: What is the output of this code?  
  
let theFuture = new Date(2035, 9, 21, 7, 28, 0);  
console.log(theFuture);  
  
- (A) Sun Oct 21 2035 07:28:00 GMT-0500  
- (B) Sun Nov 21 2035 07:28:00 GMT-0500  
- (C) Sun Oct 21 2035 00:00:00 UTC  
- (D) Undefined

**Question 48 (ID: 1.4.2):** Multiple Choice: What is the correct syntax for an HTML comment?  
 - (A) <comment>This is a comment</comment>  
 - (B) <!-- This is a comment -->  
 - (C) // This is a comment  
 - (D) # This is a comment

**Question 49 (ID: 4.11.9):** Multiple Choice: What is the role of regular expressions in validating form input?  
  
(A) To match the input against specific patterns such as phone numbers or ZIP codes.  
(B) To automatically correct input errors.  
(C) To prevent the form from being submitted.  
(D) To highlight invalid fields in the form.

**Question 50 (ID: 1.6.4):** Multiple Choice: What is the correct HTML element for creating a list item?  
 - (A) <item>  
 - (B) <li>  
 - (C) <listitem>  
 - (D) <ul>

# Answers

**Answer to Question 1:** (C) content-box

**Answer to Question 2:** (A) It adds descriptive text to a form field.

**Answer to Question 3:** False

**Answer to Question 4:** (A) `appendChild()`, (B) `insertBefore()`, (C) `removeChild()`

**Answer to Question 5:** (B) .

**Answer to Question 6:** (A) Using the `pattern` attribute with a regular expression, (B) Using JavaScript to validate input during the `input` event, (C) Using the `min` and `max` attributes for numerical input

**Answer to Question 7:** (A) `element.style.width = "100px"`, (B) `element.style.setProperty("color", "blue")`, (C) `element.style.removeProperty("height")`

**Answer to Question 8:** (A) The image is displayed with the specified dimensions, possibly distorted.

**Answer to Question 9:** (B) It does not start on a new line and only takes up as much width as necessary.

**Answer to Question 10:** (B) sans-serif

**Answer to Question 11:** (B) To leave notes for other developers within the code

**Answer to Question 12:** (A) padding, (B) border, (C) width, (D) height

**Answer to Question 13:** (A) 20

**Answer to Question 14:** (B) if (key in object)

**Answer to Question 15:** (A) window.location.href

**Answer to Question 16:** (C) `insertBefore()`

**Answer to Question 17:** (B) GET

**Answer to Question 18:** (B) 2

**Answer to Question 19:** (C) The most specific style according to CSS specificity rules is applied.

**Answer to Question 20:** (B) It deletes the child node from the DOM.

**Answer to Question 21:** (B) `row`

**Answer to Question 22:** (A) It prevents the browser's default action for the event.

**Answer to Question 23:** (B) To specify the initial size of a flex item before any space distribution

**Answer to Question 24:** (D) /(c|b|m)at/

**Answer to Question 25:** (B) `justify-content`

**Answer to Question 26:** (B) A string starting with "ab".

**Answer to Question 27:** (A) To check that the user input is in the correct format before submitting it to the server.

**Answer to Question 28:** (B) To display an alternative text description if the image cannot be loaded

**Answer to Question 29:** (C) padding

**Answer to Question 30:** (B) Variables can change type depending on the assigned value

**Answer to Question 31:** (B) A programming style where code runs in response to events

**Answer to Question 32:** (B) Sets the year for the `Date` object to a 4-digit year.

**Answer to Question 33:** (A) div p

**Answer to Question 34:** (B) It returns undefined.

**Answer to Question 35:** (B) The browser chooses the next available font in the list

**Answer to Question 36:** (A) Dot notation, (B) Bracket notation

**Answer to Question 37:** (B) 25

**Answer to Question 38:** (B) `getFullYear()`

**Answer to Question 39:** False

**Answer to Question 40:** (A) It returns the parent node of the current node.

**Answer to Question 41:** (A) div > \*

**Answer to Question 42:** (A) let score;, (C) const PI = 3.14;, (D) var name = "Alice";

**Answer to Question 43:** (C) "dime"

**Answer to Question 44:** (A) Susan Cain

**Answer to Question 45:** (A) 16px

**Answer to Question 46:** (C) Allows the background of underlying elements to be visible

**Answer to Question 47:** (A) Sun Oct 21 2035 07:28:00 GMT-0500

**Answer to Question 48:** (B) <!-- This is a comment -->

**Answer to Question 49:** (A) To match the input against specific patterns such as phone numbers or ZIP codes.

**Answer to Question 50:** (B) <li>