

Question 40 of 40

Time Remaining 00:45:33

You need to determine whether a string named str is empty.

What is the correct syntax?

- A. str == ""
- B. str == "null"
- C. str == null
- D. str == "empty"

Back

Next

Question 39 of 40

Time Remaining 00:4

You are creating a dynamic HTML document by using JavaScript.

You need to display a popup window that shows additional information when the user clicks a button.

Which object should you use?

- A. `document`
- B. `window`
- C. `screen`
- D. `body`

Question 38 of 40

Time Remaining 00:00

Evaluate the following code:

```
function change(student, course)
{
    student = "JavaScript Student";
    course.name = "JavaScript";
    course.grade = 100;
}

var sampleCourse = { "name": "HTML", "grade": 90 };
var sampleStudent = "HTML Student";

change(sampleStudent, sampleCourse);
console.log(sampleStudent, sampleCourse.name, sampleCourse.grade);
```

Answer Area

```
sampleStudent =
sampleCourse.name =
sampleCourse.grade =
```

Question 37 of 40

Time Remaining 00:45:53

In the first drop-down list, select the code that changes the button color when the page loads.

In the second drop-down list, select the code that changes the button color when the user clicks the button.

Note: You will receive partial credit for each correct selection.

Answer Area

```
<button id="btn">Change</button>
<script>

    function changeColor(){
        var colors=["blue","green","pink","orange"];
        sub = Math.floor(Math.random()*4);
        document.getElementById("btn").style.background = colors[sub];
    }
</script>
```

Question 36 of 40

Time Remaining 00:46:00

You are using JavaScript to write a safe root Math utility.

Given the function `safeRoot(a, b)`, the function must perform the following tasks:

- If the radicand (`a`) is non-negative, return `Math.pow(a, 1 / b)`.
- If the radicand (`a`) is negative:
 - If the index (`b`) is divisible by 2, return the text `Result is an imaginary number`.
 - Otherwise, return `-Math.pow(-a, 1 / b)`.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
function safeRoot(a, b) {  
    if (a <= 0) {  
        if (b % 2 === 0) {  
            return "Result is an imaginary number";  
        } else {  
            return -Math.pow(-a, 1 / b);  
        }  
    } else {  
        return Math.pow(a, 1 / b);  
    }  
}
```

Question 35 of 40

Time Remaining 00:46:03

You are creating a dynamic HTML page by using JavaScript.

The page displays an image of the sun. When the user moves the mouse pointer across the image, the image should change from the sun to the moon. When the user moves the mouse pointer away from the image, the image should revert to the sun.

You need to write the code for the image swap.

Which two events should you program for? (Choose 2.)

- A. onmouseout
- B. onmouseenter
- C. onmouseup
- D. onmouseover
- E. onmousedown

Back

Next

Question 34 of 40

Time Remaining 00:46:07

Analyze the following code:

```
var x = 10;
function multiplyNumber(x) {
    try {
        const y = 15;
        y = (2 * x);
        console.log (y);
    }
    catch {
        console.log (3 * x);
    }
    finally {
        console.log (4 * x);
    }
}
x = multiplyNumber(x)
```

What is the console output?

- A. 20
- B. 30
- C. 20
40
- D. 30
40

Back

Next

Question 33 of 40

Time Remaining 00:46:10

You work as a JavaScript developer. You are writing a simple script that performs the following actions:

- Declares and initializes an array
- Fills the array with 10 random integers
- Adds every other number starting with the first element

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
var numbers =  ;
for (var i = 0; i < 10; i++) {
    numbers.  (Math.round(Math.abs(Math.random() * 10)));
}
var sum = 0;
for (var j = 0; j < 10; j = j+2) {
    sum +=  ;
}
console.log(sum);
```

Back

Next

Question 33 of 40

Time Remaining 00:46:15

You work as a JavaScript developer. You are writing a simple script that performs the following actions:

- Declares and initializes an array
- Fills the array with 10 random integers
- Adds every other number starting with the first element

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
var numbers = [ ] ;
for (var i = 0; i < 10; i++) {
    numbers. [ ] (Math.round(Math.abs(Math.random() * 10)));
}
var sum = 0;
for (var j = 0; j < 10; j = j+2) {
    sum += [ ] ;
}
console.log(sum);
```

Question 32 of 40

Time Remaining 00:46:19

You are designing a web page with a script that must dynamically change the content of a paragraph element to display the value returned by the function `randomQuote()`. You write the following code. Line numbers are included for reference only.

```
01 <!DOCTYPE html>
02 <html>
03 <body>
04 <p id="tester" onclick="changeText()">Click to change the content.</p>
05 <input type="button" value="Change Text" onclick="changeText()" />
06 <script>
07 function changeText() {
08
09 }
10 </script>
11 </body>
12 </html>
```

Which code segment should you use at line 08?

- A. `document.getElementById("tester").script = randomQuote();`
- B. `document.getElementById("tester").title = randomQuote();`
- C. `document.getElementById("tester").value = randomQuote();`
- D. `document.getElementById("tester").innerHTML = randomQuote();`

Back

Next

Question 31 of 40

Time Remaining 00:46:24

Several HTML pages need to reference the same JavaScript code.

Where should the JavaScript code live?

- A. Within the body tags of each document
- B. Within the head tags of each document
- C. In a .js file
- D. In a .css file

Question 30 of 40

Time Remaining 00:46:28

You are writing a JavaScript program. The validGraphic function of the program checks whether the height of a graphic is equal to or greater than 50 pixels, but less than 100 pixels.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
var valid = false;
var minHeight = 50;
var maxHeight = 100;

function validGraphic(height, width) {
    if (height  minHeight  height  maxHeight) {
        valid = true;
    }
}
```

Question 29 of 40

Time Remaining 00:46:33

Evaluate the following code. Line numbers are included for reference only.

```
01 var n = 50;  
02 var c = n + 5;  
03 var a = n % 2;  
04 var d = c / 11;  
05 n = d * 2;  
06 console.log(n, c, a, d);
```

What is the value of each variable at line 06?

Move the appropriate values from the list on the left to the correct variables on the right. You may use each value once, more than once, or not at all.

Note: You will receive partial credit for each correct response.

Values

0	1	5	10	25	55	100	110
---	---	---	----	----	----	-----	-----

Variables

n	Value
c	Value
a	Value
d	Value

Back

Next

Question 28 of 40

Time Remaining 00:46:36

You are writing JavaScript within an HTML document. If JavaScript is disabled, the document must display a message informing the user that they need to enable it. You need to choose the correct HTML tag to show content when JavaScript is disabled.

Which tag should you use?

- A. `meta`
- B. `script`
- C. `link`
- D. `noscript`

Question 27 of 40

Time Remaining 00:46:44

You are performing a unit test on the following JavaScript code:

```
function validatePin(pin)
{
    var validated = !isNaN(pin) && pin.toString().length == 4;
    return validated;
}
```

You test the validatePin function by passing different arguments to it.

For each argument, select True if the function returns true, or False if it does not.

Note: You will receive partial credit for each correct selection.

Answer Area

	True	False
"ABCD"	<input type="radio"/>	<input type="radio"/>
1234	<input type="radio"/>	<input type="radio"/>
20 * 50	<input type="radio"/>	<input type="radio"/>

Back

Next

Go To Summary

Mark for Review

Mark for Feedback

Tools ▾

Question 26 of 40

Time Remaining 00:46:51

You are unit testing the following JavaScript function:

```
function validateCode(code)
{
    var validated = !isNaN(code) && code.toString().length == 6;
    return validated;
}
```

For each statement about the function, select True or False.

Note: You will receive partial credit for each correct selection.

Answer Area

True	False
<input type="radio"/>	<input type="radio"/>

If the code parameter is set to 111111, the function returns true.

If the code parameter is set to "012345", the function returns true.

If the code parameter is set to "XYZXYZ", the function returns true.

If the code parameter is set to 2000 * 300, the function returns true.

Back

Next

Go To Summary

Mark for Review

Mark for Feedback

Tools ▾



Question 25 of 40

Time Remaining 00:46:56

You are writing a JavaScript program that collects employee data and stores it in a database. Your program handles a wide variety of data, including text and different types of numbers.

You need to ensure that the program handles the data so that it can be stored in the database with the correct data type.

For each code segment, determine the data type that is being handled.

Move the appropriate data types from the list on the left to the correct code segments on the right. You may use each data type once, more than once, or not at all.

Note: You will receive partial credit for each correct match.

Data Types

Boolean	Number
Object	String
Undefined	

Code Segments

var age = 23; Data Type
var exempt = false; Data Type
var initial = 'D'; Data Type
var salary = 123.5; Data Type
var zip = "81000"; Data Type



Question 24 of 40

Time Remaining 00:47:02

You are writing a web application that stores customer information in an array of objects. Each `Customer` object has the following properties:

- `customerName`
- `lastOrderDate`
- `orderAmount`

You need to create and populate a list of customers and identify customers who placed orders in the last 3 years.

Complete the code by selecting the correct option from each drop-down list.

Answer Area

```
for (var i = 0; i < customers.length; i++) {
    var customer = customers[i];
    var currentDate = new Date();
    var orderDate = new Date(customer.lastOrderDate);
    if (< 3) {
        console.log("Customer " + customers[i].customerName +
                    " placed order " + dateDiff(currentDate, orderDate));
    }
}
```

[Go To Summary](#)

[Mark for Review](#)

[Mark for Feedback](#)

Tools ▾

[Back](#)

[Next](#)



Question 23 of 40

Time Remaining 00:47.03

You are working on an application for a hotel. The application should display each type of room on a new line within a paragraph.

You create the following code. Line numbers are included for reference only.

```
01 <!DOCTYPE html>
02 <html>
03 <body id="body">
04 <p id="para"><br /></p>
05 <script>
06   var rooms = ["Single","Double","Triple","Suite"];
07   var i = 0;
08   for (i=0;i<rooms.length;i++){
09
10   }
11 </script>
12 </body>
13 </html>
```

Which line of code should you use at line 09?

- A. document.getElementById("para").innerHTML += rooms[i];
- B. document.getElementById("para").innerHTML += rooms[i]+
;
- C. document.getElementById("para").innerHTML += rooms[i]+
;
- D. document.getElementById("para").innerHTML = rooms[i]+
;

[Go To Summary](#) [Mark for Review](#) [Mark for Feedback](#) [Tools ▾](#)

Back

Next



Question 22 of 40

Time Remaining 00:47:16

You need to create an external JavaScript file that contains a function named showArea. The function displays the area of a rectangle.

Which code segment correctly implements this requirement?

A.

```
<body>
<script>
function showArea(length, width) {
    alert(length * width);
}
</script>
</body>
```

B.

```
<script>
function showArea(length, width) {
    alert(length * width);
}
</script>
```

C.

```
<head>
<script>
function showArea(length, width) {
    alert(length * width);
}
</script>
</head>
```

D.

```
function showArea(length, width) {
    alert(length * width);
}
```

Question 21 of 40

Time Remaining 00:47:22

Your company offers a 10 percent discount if the day of the week is Wednesday.

You need to write a JavaScript function named `getDiscount` that meets the following requirements:

- Accepts the day of the week (`day`) as a string
- Returns the appropriate `discount`

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
01 function getDiscount(day) {  
02     var discount = 0;  
03     day = day.toLowerCase();  
04     if (day === "wednesday") {  
05         discount = .1;  
06         break;  
07     } else {  
08         discount = 0;  
09         break;  
10     }  
11 }  
12 return discount;  
13 }
```

Question 20 of 40

Time Remaining 00:47

You review the following JavaScript code:

```
var x = "10";
var y = x + 10;
```

When the code runs, what is the value of y?

- A. 20
- B. 1010
- C. NaN
- D. The value of y is undefined.

Back

Next

Question 19 of 40

Time Remaining 00:47:35

You are creating a web page that contains a script with a function named `calculate`.

The function accepts three parameters:

- The first parameter is a string containing the name of the `calculate` operation to perform.
- The second parameter is the first number in the `calculate` operation.
- The third parameter is the second number in the `calculate` operation.

The function will call an inner function based on the operation.

Complete the code by selecting the correct option from each drop-down list.

Answer Area

```
function calculate(operation, a, b) {  
    switch (operation) {  
        case 'multiply':  
            [ ]  
        case 'divide':  
            [ ]  
    }  
    [ ]  
    return x * y;  
}  
[ ]  
return n / d;
```

Question 18 of 40

Time Remaining 00:47:40

You need to write a loop that performs the following tasks:

- Traverse the length of an array to find the value orange.
- If an array element value is null, immediately go to the next element.
- When the value is found, exit the loop.

Complete the code by moving the appropriate keywords from the list on the left to the correct positions on the right. You may use each keyword once, more than once, or not at all.

Keywords

Answer Area

```
<!DOCTYPE html>
<html>
<head>
<script>

function doWork() {
    var list = ['apple', 'pear', null, 'orange', 'banana'];
    [ ] (i = 0; i < list.length; i++) {
        if(list[i] == null)
            [ ];
        if(list[i] == 'orange') {
            alert('found');
            [ ];
        }
        console.log(list[i]);
    }
}
```

[Go To Summary](#)

[Mark for Review](#)

[Mark for Feedback](#)

Tools ▾

[Back](#)

[Next](#)

Question 17 of 40

Time Remaining 00:47:46

For each statement, select True or False.

Note: You will receive partial credit for each correct selection.

Answer Area

	True	False
Form POST requests are cached.	<input type="radio"/>	<input type="radio"/>
The data length of form GET requests is restricted.	<input type="radio"/>	<input type="radio"/>
Form POST requests are stored in the browser history.	<input type="radio"/>	<input type="radio"/>
You should use only GET requests when handling sensitive form data.	<input type="radio"/>	<input type="radio"/>

Back

Next

Question 16 of 40

Time Remaining 00:47:49

You plan to use the Math object in a JavaScript application. You write the following code to evaluate various Math functions:

```
var ceil = Math.ceil(100.5);
var floor = Math.floor(100.5);
var round = Math.round(100.5);
```

What are the final values for the three variables? Select the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

ceil = ▾

floor = ▾

round = ▾

Question 15 of 40

Time Remaining 00:47:53

You are creating an application that requires a title and a numbered list. The title will not include any HTML markup.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
<body>
    <h1 id="title"></h1>
    <section id="showList"></section>
    <button id="wish">Wish List</button>
    <script>
        var list=["Bicycle","Guitar","Computer","Camera"];
        var text="";
        document.getElementById("wish").addEventListener("click",function(){
            for (var sub=0;sub<list.length;sub++){
                text+="- " + list[sub] + "
";
            }
            text+="</ol>";
        })
    </script>
</body>
```

Back

Next

Question 14 of 40

Time Remaining 00:47:59

Your instructor asks you to write a program that uses simple rules to help determine whether a person should take the train (`Take Train`), drive their car (`Drive your car`), or ride their bike (`Ride Bike`), depending on the weather conditions and the amount of gas in their car's tank.

The program must implement these rules:

- When the `temperature` is above 65 degrees and it is not raining, the person should ride their bike.
- When it is raining, the person should drive their car.
- If the `fuelTank` has half a tank of gas or less, the person should take the train.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
if(temperature > 65 [ ] training)
    advice = "Ride Bike";
else if(fuelTank [ ] .5)
    advice = "Take Train";
else advice = "Drive your car";
```

Back

Next

Question 13 of 40

Time Remaining 00:48:03

You are creating a function named `countdown`. The function accepts a parameter named `start`, and displays a countdown from that number to (and including) zero in increments of one.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
function countdown(start) {  
    for ( [ ] [ ] [ ] ) {  
        console.log(i);  
    }  
}
```

Back**Next**

Question 12 of 40

You need to use JavaScript to access the section1 element in the following code segment:

```
<div id='sectionA'>  
<div id='section1'>
```

Which method should you use?

- A. `getElementsByName`
- B. `getElementById`
- C. `getElementsByClassName`
- D. `getElementsByName`

Question 11 of 40

Time Remaining 00:48:19

You are designing a web page that displays a list of animals. The web page includes a script that outputs animals from a list.

You write the following HTML markup to test the script:

```
<p>Animals</p>
<ul>
    <li>Dog</li>
    <li><strong>Cat</strong></li>
    <li>Lion</li>
</ul>
<p>Click the button to display the animals.</p>
<button onclick="showList()">Show List</button>
<div id="list"></div>
```

Answer Area

```
function showList() {
    var list = document. ....
    for (var i = 0; i < list.length; i++) {
        .... ("list"). .... += list[i]. .... + "<br>";
        document. ....
    }
}
```

Back**Next**[Go To Summary](#)[Mark for Review](#)[Mark for Feedback](#)[Tools](#)

Question 10 of 40

Time Remaining 00:48:25

Analyze the following code:

```
function calculateSum(x,y) {  
    const sum = 0;  
    try {  
        x = x * 2;  
        y = y + 5;  
        sum = x + y;  
        return sum;  
    }  
    catch(error) {  
        console.log('Error');  
    }  
}
```

```
const result = calculateSum(5, 7);
```

What happens when calculateSum runs?

- A. An exception is thrown and caught.
- B. The function returns 22.
- C. The function returns 0.
- D. A syntax error occurs.

[Go To Summary](#)[Mark for Review](#)[Mark for Feedback](#)[Tools ▾](#)[Back](#)[Next](#)

Question 9 of 40

Time Remaining 00:48:30

You are creating a script that will assign a category based on the user's age. The script must implement the following rules:

- Assign users who are at least 24 years old but less than 36 years old to CAT1.
- Assign users who are at least 36 years old but less than 46 years old to CAT2.
- Assign all other users to CAT3.

Complete the code by moving the appropriate code segments from the list on the left to the correct positions on the right. You may use each code segment once, more than once, or not at all.

Note: There is more than one correct order. You will receive partial credit for each response. You will receive credit for any correct order.

Code Segments

```
else  
else if (age >= 24 && age <= 35)  
else if (age >= 36 && age <= 45)  
else if (age > 45)  
if (age >= 24 && age <= 35)  
if (age >= 36 && age <= 45)  
if (age > 45)
```

Answer Area

```
var category;  
category = 'CAT1';  
  
category = 'CAT2';  
  
category = 'CAT3';
```

Go To Summary Mark for Review Mark for Feedback Tools ▾

Back Next



Question 8 of 40

Time Remaining 00:48:34

You are using JavaScript to create a function that calculates admission price (`ticketPrice`).

The function must accept the age of the customer (`age`) as a parameter and implement the following rules:

- Customers who are younger than 5 years old get in free.
- Customers who are 65 years old or older get in free.
- Customers who are from 5 to 17 years old pay \$10.
- All other customers pay a price of \$20.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
function ticketPrice(age) {  
    var price = 20;  
       
    }  
    return price;  
}
```

Back

Next 

Go To Summary Mark for Review Mark for Feedback Tools ▾



Question 7 of 40

Time Remaining 00:48:39

You are writing a program that includes an `update()` function. The function must update a paragraph element with input from the user and then hide the input box.

You write the following code. Line numbers are included for reference only.

```
01 <html>
02 <body>
03 <p id="para">Enter your name</p>
04 <input type="text" id="box" onchange="update()" value="">
05 <script>
06 var output = document.getElementById("para");
07 var input = document.getElementById("box");
08 function update() {
09
10
11 }
12 </script>
13 </body>
14 </html>
```

Which code should you use at lines 09 and 10?

- A. 09 output.innerHTML = input.value;
10 input.hidden = true;
 - B. 09 output = input;
10 input.hidden = true;
 - C. 09 output.value = input.innerHTML;
10 output.hidden = true;
 - D. 09 output.innerHTML =
input.innerHTML;
10 input.style.visibility = false;

[Go To Summary](#) [Mark for Review](#) [Mark for Feedback](#) [Tools](#)



Question 6 of 40

You are helping a coworker test the following form:

```
<!DOCTYPE html>
<html>
<body>
<h1>Contact Information</h1>
<form id="contact" action="processContact.php" >
  <p>First name: <input type="text" id="fname"></p>
  <p>Last name: <input type="text" id="lname"></p>
  <p><input id="sub" type="button" value="Submit form"></p>
</form>
<script>
  document.getElementById("sub").addEventListener("click",function(){
    var fname=document.getElementById("fname").value;
    alert(fname);
  });
</script>
```

Answer Area

True	False
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>
<input type="radio"/>	<input type="radio"/>

The form will submit to a script named contact.

The form will submit only if the first name and last name are entered.

The form will not submit because it is missing the submission method.

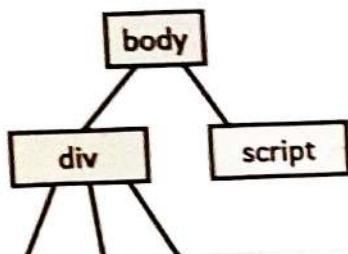
[Back](#)[Next](#)

Question 5 of 40

Analyze the DOM Tree in the image. You need to insert an `img` element that will be the first element in the body.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

**Answer Area**

```
<script>
    var newImgElement =
        newImgElement. = "_images/photo.jpg";
        var divElement = document.
        document.body.
    </script>
```

Back**Next**

Question 4 of 40

Time Remaining 00:49:07

You are creating a form that allows customers to choose the spice level of their food. If they choose Spicy, the page should display a warning.

You write the following code. Line numbers are included for reference only.

```
01 <form name = "orderForm" action = "#" method = "post">
02   <select name = "heatIndex" required>
03     <option>Mild</option>
04     <option>Medium</option>
05     <option>Spicy</option>
06   </select>
07   <button onclick = "checkWarning()">Order</button>
08 </form>
```

You write the following JavaScript code to display the warning:

```
09 function checkWarning() {
10   var option = document.forms.orderForm["heatIndex"];
11   if (option == "Spicy") {
12     alert("Spicy food: Good Luck!");
13   }
14 }
```

When you choose Spicy and click Order, the warning fails to display.

You need to solve the problem.

What should you do?

- A. Change line 07 to <button onchange = "checkWarning();">Order</button>
- B. Change line 07 to <button onclick = "checkWarning;">Order</button>
- C. Change line 10 to var option =
document.forms.orderForm["heatIndex"].value;
- D. Change line 10 to var option.value =
document.forms.orderForm["heatIndex"];

Question 3 of 40

Time Remaining 00:49:20

You are developing a web page that displays student registration information.

You need to test the code to ensure that it retrieves and displays the student information correctly.

Complete the code by selecting the correct option from each drop-down list.

Note: You will receive partial credit for each correct selection.

Answer Area

```
<body>
<h2>New Student Registration</h2>
<script>
    this.firstName = first;
    this.lastName = last;
    this.major = major;
    this.year = year;
    this.info = function(){
        document.write( "<p>You are registered as " + this.firstName + " " +
        this.lastName + "</p>" + "<p>You are a " + this.year +
        " who is majoring in " + this.major + "</p>" );
    }
}
```

Back**Next****Mark for Review****Mark for Feedback****Tools** ▾

Question 2 of 40

Time Remaining 00:49:43

A JavaScript array is initialized as follows:

```
var array = [20, 40, 60, 80];
```

You write the following code to manipulate the array:

```
array.shift();
array.pop();
array.push(10);
array.unshift(100);
```

You need to determine the contents of the array after the code runs.

Which four elements does the array contain in sequence? Move the four elements to the answer area and place them in the correct order.

Elements

10

20

40

60

80

100

Answer area



Back

Next

Question 1 of 40

Time R

Review the following JavaScript code:

```
var x = 15;  
x %= 5;
```

When the code runs, what is the value of x?

- A.
- B.
- C.
- D.