# Ch 06

# Review Questions

1. Objects representing each of the controls in a form are stored in the \_\_\_\_\_ collection.
   1. forms
   2. controls
   3. inputs
   4. elements
2. Which of the following type values for the input element does *not* enable you to provide users with a limited set of choices?
   1. radio
   2. email
   3. checkbox
   4. range
3. What value of the selectedIndex property of a select object corresponds to no selection?
   1. -1
   2. 0
   3. 1
   4. false
4. To simulate the behavior of placeholder text in older browsers, you can instead set the value of the \_\_\_\_\_\_\_ property.
   1. src
   2. alt
   3. title
   4. value
5. Which event do you use to call a function when a user selects a field or moves the insertion point into a field?
   1. blur
   2. focus
   3. input
   4. forminput
6. Which event do you use to call a function when a field is no longer selected, or a user moves the insertion point to a different field?
   1. blur
   2. focus
   3. click
   4. forminput
7. Which of the following attributes determines whether a check box or option button is selected?
   1. checked
   2. defaultChecked
   3. selected
   4. focus
8. What do you assign to the value property of a text input box to remove its content?
   1. false
   2. true
   3. ""
   4. null
9. Which of the following attributes triggers browser-based validation in modern browsers?
   1. max
   2. title
   3. alt
   4. src
10. Which of the following input type values triggers browser-based validation in modern browsers?
    1. password
    2. text
    3. radio
    4. number
11. Which of the following properties has a value of true when a user has left a required field blank?
    1. required
    2. valueMissing
    3. patternMismatch
    4. typeMismatch
12. Which of the following attributes for form child elements would you use for a field that must have a value before the form can be submitted?
    1. novalidate
    2. min
    3. required
    4. max
13. What method do you use to disable the default behavior for an event?
    1. preventDefault()
    2. checkValidity()
    3. select()
    4. getElementById()
14. Which statement moves the browser to the top of the page?
    1. scroll(top)
    2. scroll(0,0)
    3. move(top)
    4. move(0,0)
15. For any fields that require numeric values, you can use JavaScript’s built-in \_\_\_\_\_\_\_\_ function to determine whether the user actually entered a number.
    1. value()
    2. integer()
    3. isNumber()
    4. isNaN()
16. Explain how to transfer the contents of one field to another field.

You look up the value property of the source field and assign it to the value property for the target field.

1. What is the purpose of the novalidate attribute?

The novalidate attribute toggles off validation of a form when added to the opening <form> tag.

1. Explain how the validity object of the constraint validation API is used for checking the validity of form data.

The validity object contains several properties; if all of these properties have a value of false, then the value of the validity object is true.

1. Explain how to check if any option button in a set is selected.

To check if an option button is selected, you access the value of its checked property. To check if none of the option buttons in a set are selected, you can create a conditional statement using And (&&) operators. This code could check if the first button is not selected (using the ! operator), and (&&) if the second button is not selected, etc. If all of those conditions are true, the if statement is true, meaning that no button is checked.

1. Explain how to check if a user’s entry is a number.

For any fields that require numeric values, you can use JavaScript’s built-in isNaN() function to determine whether the user actually entered a number. Recall from Chapter 2 that the isNaN() function determines whether a value is the special value NaN (not a number). The isNaN() function returns a value of true if it is passed a value that is not a number; if passed a value that is a number, the function returns a value of false.

# Ch 07

# Review Questions

1. In object-oriented programming, a(n) \_\_\_\_\_\_\_\_\_\_ is a template, or blueprint, that serves as the basis for new objects.
   1. instance
   2. object
   3. method
   4. class
2. In object-oriented programming, a(n) \_\_\_\_\_\_\_\_\_\_ is an object that has been created from an existing template.
   1. instance
   2. property
   3. method
   4. class
3. Which of the following Date class constructors creates a Date object that contains the current date and time from the local computer?
   1. Date()
   2. Date(*milliseconds*)
   3. Date(*date\_string*)
   4. Date(year, month[, *date*, *hours*, *minutes*, *seconds*, *milliseconds*])
4. Which of the following parts of a date value are stored in a Date object using numeric representations, starting with zero, similar to an array?
   1. Day of the month
   2. Month
   3. Year
   4. AM/PM
5. Which Number method converts a number to a string using a specified number of decimal places?
   1. toFixed()
   2. toLocaleString()
   3. toString()
   4. valueOf()
6. Which Number method converts a number to a string that is formatted with local numeric formatting style?
   1. toFixed()
   2. toLocaleString()
   3. toString()
   4. valueOf()
7. Which is the primary reason for using any of the “to” methods of the Number class?
   1. To convert a number for use in calculations
   2. To format a date
   3. To perform calculations
   4. To convert a number that will be displayed to a user
8. Which method of the Math class rounds a value to the next lowest integer?
   1. floor()
   2. max()
   3. min()
   4. round()
9. What is the correct syntax for rounding the number 39.75 to the nearest integer?
   1. new Math = round(39.75);
   2. var mathCalc = new Math(round(39.75));
   3. Math.round(39.75);
   4. round(39.75);
10. Which of the following statements creates an empty object with the name registry?
    1. var registry;
    2. var registry = {};
    3. var registry = "";
    4. var registry = [];
11. Which of the following statements adds a new property named squareFeet to an object named RealEstate?
    1. var RealEstate.squareFeet;
    2. RealEstate.squareFeet = "";
    3. var squareFeed.RealEstate;
    4. squareFeet.RealEstate = "";
12. A property whose value is itself an object is known as a(n) \_\_\_\_\_\_\_\_\_\_.
    1. sub-property
    2. instance
    3. constructor
    4. sub-object
13. Given the object definition

var members = {

founder: "Luis"

};

which statement references the value of the founder property using an associative array?

* 1. founder
  2. members.founder
  3. members["founder"]
  4. members[0]

1. Which statement declares a method named \_\_\_\_\_\_\_\_\_\_ and sets its value to the existing calculateTotal() function?
   1. calcTotal: calculateTotal
   2. calcTotal: calculateTotal()
   3. calcTotal: function(calculateTotal)
   4. calcTotal: function(calculateTotal())
2. The built-in property that specifies the constructor from which an object was extended is called the \_\_\_\_\_\_\_\_\_\_ property.
   1. default
   2. origination
   3. prototype
   4. source
3. Explain the principle of information hiding. What does the term “black box” refer to?

Encapsulation places code inside what programmers like to call a black box; when an object is encapsulated, other parts of the program cannot read or modify the code itself—all internal workings are hidden. When you include encapsulated objects in your programs, users can see only the methods and properties of the object that you allow them to see. Essentially, the principle of information hiding states that any methods and properties that other programmers do not need to access or know about should be hidden. By removing the ability to see inside the black box, encapsulation reduces the complexity of the code, allowing programmers who use the code to concentrate on the task of integrating the code into their programs. Encapsulation also prevents other programmers from accidentally introducing a bug into a program, or from possibly even stealing the code and claiming it as their own.

1. Explain why programmers use the terms “variable” and “object” interchangeably.

The name you use for an instantiated object is really a variable, just like an integer or string variable. The difference is that the data the variable represents happens to be an object instead of a number or string. In the same manner that you use a variable name to represent a primitive data type, such as an integer, in computer memory you also use a variable name to represent an object. Because the objects you declare in your JavaScript program are actually a certain type of variable, you use the var keyword to identify them as variables.

1. Explain why JavaScript is not a true object-oriented programming language.

You can base objects in your programs on built-in JavaScript classes such as the Array and Date objects. However, you cannot create your own classes in JavaScript. For this reason, JavaScript is said to be an object-based programming language instead of an object-oriented programming language.

1. Explain how to assign a new property to a custom object.

Although you can declare properties within an object definition, it’s not required. As an alternative, you can add a new property simply by declaring its value. This is similar to the process of creating a new variable; however, unlike in a variable declaration, you don’t use var or any other keyword to create a new object property. You specify the object name and the new property name with dot syntax, and then use the assignment operator to specify the value.

1. Explain when you would use an object literal and when you would create a constructor function.

The main difference between creating an object with an object literal and using a constructor function is that the constructor function serves as a template, enabling you to create any number of objects with the same set of properties and methods defined in the constructor function. If you need to create a unique object in a program, an object literal is the easiest solution. However, if your program will require multiple instances of an object with the same properties and methods, then creating a constructor function is more efficient.

# Ch 08

# Review Questions

* + - 1. Extracting characters or substrings from a larger text string is known as \_\_\_\_\_\_\_\_\_\_.
         1. parsing
         2. compiling
         3. rendering
         4. stripping
      2. What is the property of the String class that returns the number of characters in a string?
         1. chars
         2. size
         3. width
         4. length
      3. Regular expression patterns in JavaScript must begin and end with which characters?
         1. { }
         2. / /
         3. ( )
         4. [ ]
      4. Which of the following is a method of the RegExp class for working with regular expressions?
         1. search()
         2. subexpression()
         3. test()
         4. class()
      5. Which metacharacter in a regular expression represents any single character?
         1. $
         2. ^
         3. \
         4. .
      6. Which metacharacter(s) in a regular expression represent characters to exclude?
         1. ()
         2. []
         3. [^]
         4. -
      7. A pattern that matches the beginning or end of a line is called a(n) \_\_\_\_\_\_\_\_\_\_.
         1. anchor
         2. root
         3. metacharacter
         4. class
      8. To match any metacharacter as a literal value in a regular expression, you must \_\_\_\_\_\_\_\_\_.
         1. enclose the character in brackets ([ ])
         2. enclose the character in parentheses (( ))
         3. precede the character with a slash ( / )
         4. precede the character with a backslash ( \ )
      9. Which of the following expressions would return false?
         1. /^1./.test("1.10")
         2. /^1\./.test("1.10")
         3. /1.$/.test("1.10")
         4. /1\.$/.test("1.10")
      10. Which of the following quantifiers specifies that the preceding character repeat at least 2 times?
          1. {2}
          2. {2,}
          3. +
          4. ?
      11. Which of the following characters do you use to create a subexpression?
          1. [ ]
          2. / /
          3. ( )
          4. { }
      12. Which of the following expressions represents numeric characters?
          1. \s
          2. \b
          3. \d
          4. \D
      13. Which method of the Array class removes the last element from the end of an array?
          1. pop()
          2. push()
          3. shift()
          4. unshift()
      14. What array would result from the following statement?  
          [white, silver, blue].splice(1, 0, "gray");
          1. [gray, silver, blue]
          2. [white, gray, blue]
          3. [white, gray, silver, blue]
          4. [gray, white, silver, blue]
      15. The JSON.parse() method converts a value to which data type?
          1. Object
          2. String
          3. Array
          4. Number
      16. After running the statements  
          var media = "dvd",  
           label = media.toUpperCase();  
          what is the value of the media variable, and why?

After running these statements, the value of media is “dvd”. The toUpperCase() method transforms the string “dvd” to “DVD” when assigning the value to the label variable, but the value of the original media variable is unaffected by the second statement.

* + - 1. What is the difference between the indexOf() and lastIndexOf() methods?

The indexOf() method identifies the *first* occurrence of a specified string in a target string. The lastIndexOf() method identifies the *last* occurrences of the specified string in the target string.

* + - 1. Explain why you would specify negative argument values for the slice() method.

If you specify a negative value for the starting index, the slice() method starts at the end of the text string; -1 represents the last character in the string, -2 represents the second to last character, and so on. If you specify a negative value for the ending index, the number of characters that the slice() method extracts also starts at the end of the text string.

* + - 1. Does the expression "a" < "A" evaluate to true or false? Why?

The expression evaluates to false. An uppercase letter *A* is represented by Unicode value 65, whereas a lowercase letter *a* is represented by Unicode value 97. For this reason, a lowercase *a* is considered greater than an uppercase *A*. The expression "a" > "A" would evaluate to true.

* + - 1. What is the difference between the shift() and unshift() methods of the Array class?

The shift() method removes and returns the first element from the beginning of an array, whereas the unshift() method adds one or more elements to the beginning of an array.

# Ch 09

# Review Questions

1. HTTP was originally designed to be \_\_\_\_\_\_\_\_\_\_, which means that web browsers stored no persistent data about a visit to a web site.
   1. hidden
   2. encrypted
   3. stateless
   4. stateful
2. What character is used to separate individual name-value pairs within a query string?
   1. &
   2. $
   3. ?
   4. %
3. To concatenate names and values into a query string, you can use methods of the \_\_\_\_\_\_\_\_\_\_ class.
   1. Array
   2. String
   3. Number
   4. Date
4. The \_\_\_\_\_\_\_\_\_\_ method of a form automatically creates a query string from its field values.
   1. reset
   2. change
   3. click
   4. submit
5. Which type value for the input element creates a field that is not displayed by web browsers?
   1. hidden
   2. invisible
   3. none
   4. text
6. Which is the only required attribute of the cookie property?
   1. path
   2. domain
   3. expires
   4. name
7. You can use special characters in your cookies if you use \_\_\_\_\_\_\_\_\_\_.
   1. secure coding
   2. encoding
   3. a CDN
   4. the secure attribute
8. Cookies created without a(n) \_\_\_\_\_\_\_\_\_\_ attribute are available for the current browser session only.
   1. path
   2. domain
   3. expires
   4. name
9. Which function do you use as part of the process of parsing a cookie?
   1. encodeURI()
   2. decodeURI()
   3. encodeURIComponent()
   4. decodeURIComponent()
10. To delete cookies in your code, you change the value of which cookie attribute?
    1. path
    2. domain
    3. expires
    4. name
11. Which property of the Web Storage API do you use to store data that remains until you run code to delete it, similar to persistent cookies?
    1. localStorage
    2. sessionStorage
    3. persistentStorage
    4. webStorage
12. Which method do you use to delete a specific item from Web Storage?
    1. clear()
    2. getItem()
    3. removeItem()
    4. setItem()
13. Your first line of defense in securing your JavaScript programs is to \_\_\_\_\_\_\_\_\_.
    1. require a login for every user
    2. validate all user input
    3. encode all data
    4. restrict access to a single subdomain
14. An attack in which a program or user enters JavaScript code that changes the function of a web page is known as a(n) \_\_\_\_\_\_\_\_\_\_ attack.
    1. code injection
    2. secure coding
    3. cross-site
    4. SSL
15. It’s important to \_\_\_\_\_\_\_\_\_\_ characters in form field values that could be part of malicious code, which involves converting the characters to their character code equivalents.
    1. encrypt
    2. decrypt
    3. encode
    4. escape
16. Why should a password never be stored in a cookie?

Cookies are stored on a user’s computer as plain text files. If a user’s computer is infected with malware, any data, including the contents of cookies, is vulnerable to being stolen and used fraudulently by a third party.

1. What is the difference between temporary and persistent cookies?

Temporary cookies remain available only for the current browser session. Persistent cookies remain available beyond the current browser session and are stored in a text file on a client computer.

1. Explain how to modify an existing cookie.

To modify an existing cookie, you simply assign a new name-value pair to the document.cookie property. If the name-value pair already exists it will be overwritten.

1. Describe one advantage and one disadvantage of using Web Storage rather than cookies.

Creating, reading, and removing cookies requires complex code that’s not always straightforward. In addition, all cookies are sent to the server with each HTTP request. However, Web Storage is not supported by a number of older browser versions.

1. Explain what a code injection attack is, and one step you can take to prevent such attacks.

JavaScript code on a web page that is not written securely is vulnerable to a code injection attack, in which a program or user enters JavaScript code that changes the function of the web page. For instance, a malicious program could open a web page containing a form and enter JavaScript code in one of the form fields designed to retrieve sensitive information from the server. Such a program could then relay this information to a person other than the owner.

Validating forms before submission is an important part of preventing injection attacks. In addition, it’s important to escape characters in form field values that could be part of malicious code, which involves converting the characters to their character code equivalents, as you do when URL encoding cookie data. For form input, escaping is generally performed by the web server before processing user input.

# Ch 10

# Review Questions

* + - 1. Which type of events focus on responding to finger touches on a touchscreen?
         1. Mouse events
         2. Touch events
         3. Pointer events
         4. Drag events
      2. Which type of events aim to handle input from a mouse, finger, or stylus with each event?
         1. Mouse events
         2. Touch events
         3. Pointer events
         4. Drag events
      3. Mobile devices use touch to perform browser and device interactions, known as \_\_\_\_\_\_\_\_\_\_, for activities such as scrolling the page.
         1. touches
         2. points
         3. clicks
         4. gestures
      4. \_\_\_\_\_\_\_\_\_\_ devices allow for multiple touches on the screen at the same time.
         1. Pointer
         2. Desktop
         3. Touchpad
         4. Multitouch
      5. In the touch events model, which of the following is an array containing the coordinates of all touches on the current element?
         1. touches
         2. targetTouches
         3. changedTouches
         4. touchesXY
      6. You can access methods of the Geolocation API using the geolocation property of the \_\_\_\_\_\_\_\_\_\_ object.
         1. Window
         2. Screen
         3. Navigator
         4. Document
      7. The *success* and *fail* arguments of the getCurrentPosition() method, which are executable code, are examples of \_\_\_\_\_\_\_\_\_\_\_.
         1. callbacks
         2. properties
         3. API keys
         4. minifiers
      8. Which option property do you add to a getCurrentPosition() request to specify a length of time to wait before cancelling the request?
         1. enableHighAccuracy
         2. timeout
         3. maximumAge
         4. coords
      9. Converting a physical address to a pair of latitude and longitude coordinates is known as \_\_\_\_\_\_\_\_\_\_.
         1. minifying
         2. geolocation
         3. a callback
         4. geocoding
      10. If your browser does not ask whether you want to share your location information while testing an app that uses geolocation, you may need to \_\_\_\_\_\_\_\_.
          1. implement touch events
          2. implement pointer events
          3. clear your saved geolocation preferences
          4. minify your files
      11. Which API provides access to properties and methods related to the device battery?
          1. Geolocation API
          2. Battery Status API
          3. Device Orientation API
          4. WebRTC API
      12. Which API provides access to data from a device’s gyroscope and accelerometer?
          1. Geolocation API
          2. Battery Status API
          3. Device Orientation API
          4. WebRTC API
      13. Which API enables apps to receive data from a device’s camera and microphone, as well as to send and receive audio, video, and other types of data in real time?
          1. Geolocation API
          2. Battery Status API
          3. Device Orientation API
          4. WebRTC API
      14. A(n) \_\_\_\_\_\_\_\_\_\_ waits for something else to happen before running.
          1. minifier
          2. prettifier
          3. asynchronous callback
          4. synchronous callback
      15. \_\_\_\_\_\_\_\_\_\_ removes comments, indents, and line breaks, and tweaks code in other ways to make it smaller.
          1. Minifying files
          2. Responsively loading scripts
          3. Implementing the Geolocation API
          4. Implementing touch events
      16. What is a touch cascade?

In a touch cascade, a browser checks a touched element for an event handler for multiple events, including some mouse events, in the following order: touchstart, touchend, mouseover, mousemove, mousedown, mouseup, click.

* + - 1. Why is it useful to add a timeout to a getCurrentLocation() request using the setTimeout() method of the Window object?

If a user ignores or doesn’t notice the request, the timeout specified as a parameter never starts counting. In addition, some browsers offer users the option of saying “Not now” to the permission request, instead of “Never,” and these browsers treat a “Not now” answer the same as they would treat a lack of response to the request. Therefore, your code must include one additional layer to deal with this scenario.

* + - 1. Explain the roles of the Geolocation API and the Google Maps API in displaying a map showing a user’s current position in your app.

You use the Geolocation API to obtain information about a user’s current position. The Google Maps API enables you to add content provided by the Google Maps service, including maps, to your own apps.

* + - 1. What is a gyroscope? What is an accelerometer? Explain how data from these devices can be useful in a web app.

A device’s gyroscope detects its orientation in space, and its accelerometer detects changes in speed. By comparing changes in orientation from the gyroscope, your code can respond to user actions including tilting a device. The accelerometer reports values for acceleration and rotation, which you could use to determine if a user is moving or standing still.

* + - 1. Explain how to load a script responsively.

First you divide your external JavaScript code into at least two files: one containing code that must be loaded when the page loads, and a second containing code that isn’t needed immediately. You include a script element in your HTML to load the first .js file. Then in the JavaScript code for the first .js file, you include code that adds a node referencing the second JavaScript file only if it is needed.

# Ch 11

# Review Questions

* + - 1. Which object uses HTTP to exchange data between a client computer and a web server?
         1. JSON
         2. Math
         3. XMLHttpRequest
         4. Ajax
      2. A server that acts for or performs requests for other clients and servers is a(n) \_\_\_\_\_\_\_\_\_\_\_.
         1. proxy
         2. Ajax
         3. request
         4. response
      3. A data source made available on one domain for use on other domains across the web is a(n) \_\_\_\_\_\_\_\_\_\_.
         1. server
         2. web service
         3. HTTP server
         4. HTTP client
      4. Which of the following is the first step in using Ajax to update data?
         1. Receive the response from the server, containing the requested data.
         2. Process the data returned from the server and incorporate the data into the app.
         3. Use the XMLHttpRequest object to send a request to the server.
         4. Instantiate an XMLHttpRequest object for the web browser where the script will run.
      5. When a user’s browser asks a web server for a web page, the process is known as a(n) \_\_\_\_\_\_\_\_\_\_.
         1. header
         2. request
         3. response
         4. host
      6. A web server’s reply when a user’s browser asks for a web page is known as a(n) \_\_\_\_\_\_\_\_\_\_.
         1. header
         2. request
         3. response
         4. host
      7. The temporary storage of data for faster access is known as \_\_\_\_\_\_\_\_\_\_.
         1. parsing
         2. caching
         3. a request
         4. a response
      8. An HTTP response code indicating a successful request begins with which digit?
         1. 1
         2. 2
         3. 3
         4. 4
      9. Which property of an XMLHttpRequest object contains a JSON string returned from a web service?
         1. value
         2. innerHTML
         3. responseXML
         4. responseText
      10. Which type of request stops processing JavaScript code until a response is returned from the server?
          1. Synchronous
          2. Asynchronous
          3. JSON
          4. XML
      11. Which type of request allows JavaScript to continue processing while it waits for a server response?
          1. Synchronous
          2. Asynchronous
          3. JSON
          4. XML
      12. When using an asynchronous request, you cannot process the response until the readyState property is assigned a value of \_\_\_\_\_\_\_\_\_\_.
          1. 1
          2. 2
          3. 3
          4. 4
      13. Which method of updating content involves the server for a web service explicitly indicating that data may be used on other domains?
          1. Ajax
          2. Ajax with a proxy
          3. JSON-P
          4. CORS
      14. Which of the following does a JSON-P request use?
          1. An XMLHttpRequest object
          2. A script element
          3. A proxy
          4. A meta element
      15. Which response header is used by CORS?
          1. Vary
          2. Server
          3. Access-Control-Allow-Origin
          4. Location
      16. Explain how a proxy is used for an Ajax request.

The same-origin policy applies only to JavaScript, and not to other programs running on a web server. This means that you can use a server-side script as a proxy to access data from another domain. The server-side proxy script can return the data to the client computer as it is requested with the XMLHttpRequest object. Using a proxy remains a common technique for working around the same-origin policy to access third-party content.

* + - 1. What is the difference between a standard HTTP request and a request that uses the XMLHttpRequest object?

Unlike standard HTTP requests, which usually replace the entire page in a web browser, the XMLHttpRequest object can be used to request and receive data without reloading a web page.

* + - 1. Why do you need to run an app using Ajax from a web server to test it rather than opening it as a local file?

Opening a local file in a web browser requires the use of the file:/// protocol. Because Ajax relies on the XMLHttpRequest object to retrieve data, you must open your Ajax files from a web server with the HTTP (http://) or HTTPS (https://) protocol.

* + - 1. Why do you not normally send a Connection header with a value of close?

Opening and closing HTTP connections represent a significant bottleneck in loading a web page, increasing the amount of time it takes for a document to load. To improve performance between client requests and server responses, HTTP/1.1 automatically keeps the client-server connection open until the client or server explicitly closes it by assigning a value of close to the Connection header. This means that you can make your Ajax programs faster by reusing an instantiated XMLHttpRequest object instead of re-creating it each time you send a server request.

* + - 1. Explain why incorporating content from another domain using JSON-P opens a potential security hole in your website.

If the site from which you’re requesting data is compromised by malicious code, the content you receive from that site is a potential route to attack your site as well. For this reason, it’s important to use JSON-P only with a web service that you trust. In addition, a JSON-P request that requires authentication such as a password or API key exposes these sensitive credentials to end users. For this reason, you should generally use JSON-P that requires authentication only with trusted users, such as in an app that is used only by your organization’s employees.

# Ch12

# Review Questions

* + - 1. What language is the jQuery library written in?
         1. CSS
         2. JavaScript
         3. HTML
         4. PHP
      2. What is a difference between jQuery 1.x and jQuery 2.x?
         1. Only jQuery 1.x is written in JavaScript.
         2. Only jQuery 2.x works with modern browsers.
         3. Only jQuery 1.x supports IE 6, 7, and 8.
         4. jQuery 1.x is smaller than jQuery 2.x.
      3. Instead of hosting your own copy of the jQuery library, you can link an HTML document to a copy of the jQuery file \_\_\_\_\_\_\_\_.
         1. on the W3C website
         2. on a CDN
         3. on the WHATWG website
         4. in the style sheet
      4. What is the first step in using jQuery?
         1. Link the .js file that contains the library to your HTML document.
         2. Create a selector.
         3. Enter a method name.
         4. Enter method parameters.
      5. Every jQuery statement begins with which character?
         1. #
         2. $
         3. .
         4. {
      6. The syntax you use to select elements in a jQuery statement is essentially a concise version of which JavaScript method?
         1. getElementById()
         2. getElementsByClassName()
         3. getElementsByTagName()
         4. querySelectorAll()
      7. Which of the following selects all p elements in a document?
         1. $("p")
         2. #("p")
         3. $.("p")
         4. #.("p")
      8. Which jQuery method do you use to add a class name to one or more selected elements?
         1. clone()
         2. addClass()
         3. html()
         4. removeClass()
      9. What action does a jQuery event method perform if it is called with empty parentheses?
         1. It does nothing.
         2. It creates an event listener on the window object.
         3. It removes any matching event listener on the selection.
         4. It fires the indicated event.
      10. Which is not part of a jQuery statement to create a backward-compatible event listener?
          1. The jQuery alias
          2. A selector for the element(s) associated with the event
          3. A method that specifies the event
          4. An if/then construction
      11. Which is the correct syntax to create a function that uses jQuery?
          1. $(function) name() {  
             }
          2. $.function name() {  
             }
          3. function name() {  
             }
          4. $(name()).function {  
             }
      12. Which of the following is a jQuery animation method?
          1. focus()
          2. addClass()
          3. children()
          4. show()
      13. All jQuery animation methods can take a value in \_\_\_\_\_\_\_\_\_\_\_\_ to specify the length of the animation.
          1. minutes
          2. seconds
          3. microseconds
          4. milliseconds
      14. Some jQuery animation methods accept which keywords to set the speed of the animation?
          1. up or down
          2. slow or fast
          3. left or right
          4. true or false
      15. Which is an advantage of using jQuery animation methods rather than coding animations yourself in JavaScript?
          1. Coding the animations yourself might require writing and debugging many lines of JavaScript.
          2. The jQuery animation effects cannot be created with plain JavaScript.
          3. You cannot select certain web page elements without using jQuery.
          4. There is no particular advantage to using one or the other.
      16. What is an alias? What is the role of an alias in jQuery?

The $ that starts every jQuery statement is an alias, which is an alternative name. By default, the $ alias refers to the jQuery() function, which contains all the properties and attributes of the jQuery library. However, the $ alias is a common choice for JavaScript libraries because it is a unique and nonrestricted character. This means that if your app uses more than one library, you may need to replace the default alias for one or more of the libraries with a different alias.

* + - 1. What is the difference between calling a jQuery method with and without parameters?

Many jQuery methods serve dual functions, allowing you to look up a value or set that value. For instance, if you specify the width() attribute for a selection without a value in the parentheses, the statement returns the existing width value of the selection. However, if you specify the width() attribute with a value in the parentheses, such as width("5em"), the statement sets the width value of the selection to the specified value.

* + - 1. Why should you ensure that the script element that links to the jQuery library file comes before any other script element for a .js file that includes jQuery code?

This order ensures that browsers parse the contents of the jQuery library before attempting to interpret the jQuery statements in the other .js file.

* + - 1. What are the components of an event listener using jQuery?

To create an event listener with jQuery, you simply create a statement that starts with the jQuery alias ( $ ), specifies a selector for the element(s) associated with the event, and finishes with a method that specifies an event and the action or actions to take in response to the event.

* + - 1. Why should you avoid including jQuery in a project if you don’t need it?

If your jQuery code could be replicated with roughly the same amount of plain JavaScript, you’re generally better off not using jQuery. This makes your app quicker to load because users don’t need to download the jQuery library.