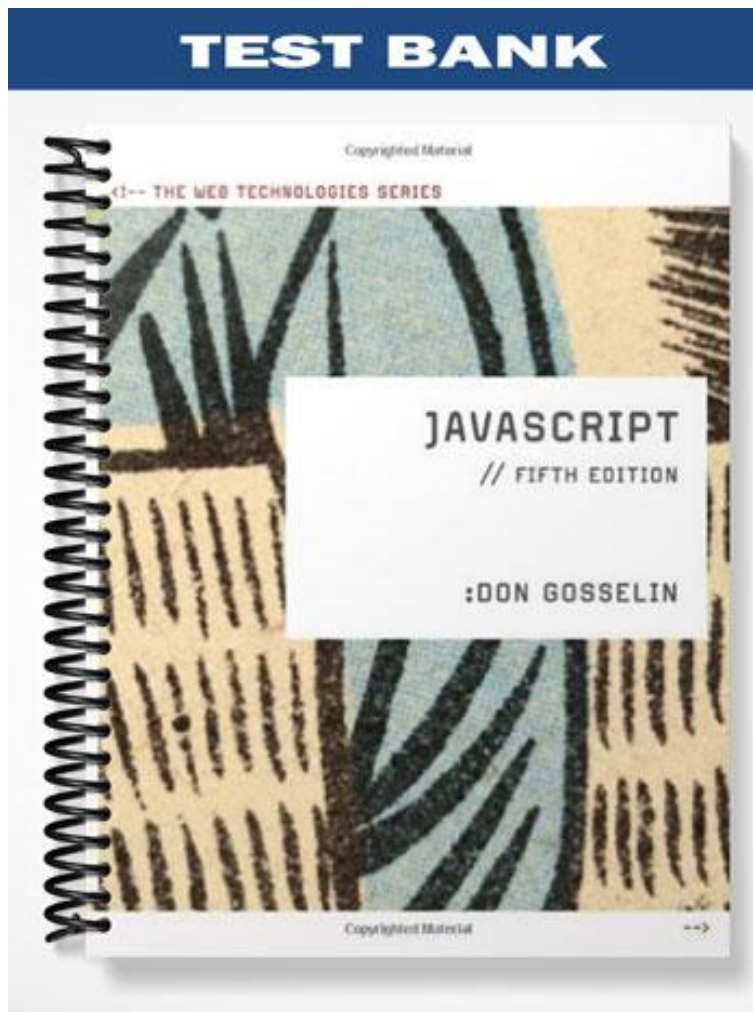


TEST BANK



ch02

True/False

Indicate whether the statement is true or false.

- ___ 1. The values a program stores in computer memory are commonly called variables. Technically speaking, though, a variable is actually a specific value in the computer's memory.
- ___ 2. JavaScript is a loosely typed programming language.
- ___ 3. In JavaScript programming, you can only use the words yes and no to indicate Boolean values.
- ___ 4. Comparison operators are used to compare two operands and determine if one numeric value is greater than another.
- ___ 5. Logical operators are used for comparing two string operands for equality.

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- ___ 6. The equal sign (=) in the following statement is called a(n) ____.
`var variable_name = value;`
 - a. value separator
 - b. equals comparison
 - c. assignment operator
 - d. declaration operator
- ___ 7. Data types that can be assigned only a single value are called ____ types.
 - a. primitive
 - b. null
 - c. numeric
 - d. Boolean
- ___ 8. Programming languages that require you to declare the data types of variables are called ____ programming languages.
 - a. dynamic typed
 - b. strongly typed
 - c. static typed
 - d. loosely typed
- ___ 9. JavaScript is a ____ programming language.
 - a. static typed
 - b. loosely typed
 - c. strongly typed
 - d. numeric typed
- ___ 10. A positive or negative number with no decimal places is called a(n) ____.
 - a. floating-point number
 - b. scientific number
 - c. exponential number
 - d. integer
- ___ 11. A(n) ____ contains a set of data represented by a single variable name.
 - a. group
 - b. array
 - c. string
 - d. list
- ___ 12. A ____ is a special type of function that is used as the basis for creating reference variables (that is, variables whose data type is the reference data type).
 - a. list builder
 - b. referencer
 - c. constructor
 - d. grouper
- ___ 13. The numbering of elements within an array starts with a number of zero (0). A(n) ____ is an element's numeric position within the array.
 - a. index
 - b. location
 - c. reference
 - d. descriptor
- ___ 14. The `Array` class contains a single property, the ____ property, which returns the number of elements in an array.

- a. count
b. show
- c. describe
d. length
- ___ 15. You use operands and operators to create expressions in JavaScript. ___ are variables and literals contained in an expression.
- a. Operators
b. Operands
- c. Locations
d. Strings
- ___ 16. You can use an arithmetic operator to return the modulus of a calculation, which is the ___ when you divide one number by another number.
- a. remainder left
b. quotient
- c. product
d. difference
- ___ 17. What is the value of `returnValue`?
- ```
var x, y, returnValue;
x = 12;
y = 8;
returnValue = x / y;
```
- a. 1  
b. 1.5
- c. 4  
d. 20
- \_\_\_ 18. What is the value of `returnValue`?
- ```
var x, y, returnValue
x = 12;
y = 8;
returnValue = x % y;
```
- a. 1
b. 4
- c. 20
d. 150%
- ___ 19. What is the value of `returnValue`?
- ```
var x, y, returnValue
x = "3";
y = "2";
returnValue = x + y;
```
- a. "3+2"  
b. 5
- c. 6  
d. 32
- \_\_\_ 20. What is the value of `x` after these two statements execute?
- ```
var x = 1;
x++;
```
- a. -1
b. 0
- c. 1
d. 2
- ___ 21. The compound addition assignment operator is ___.
- a. +=
b. ==
- c. ==+
d. =+
- ___ 22. The strict equal operator is ___.
- a. =
b. ===
- c. <>
d. !==
- ___ 23. Which is the AND operator?
- a. !=
b. ||
- c. &&
d. ==
- ___ 24. Literal strings can be assigned a zero-length string value called a(n) ___ string.
- a. empty
b. undefined
- c. short
d. byte
- ___ 25. A(n) ___ tells the compiler or interpreter that the character that follows it has a special purpose.

- | | | |
|--|----------------------|-------------------------|
| | a. exclamation point | c. null character |
| | b. escape character | d. upper case character |
- ___ 26. Which arithmetic operators have the highest precedence?
- | | |
|----------|--------|
| a. * / % | c. && |
| b. < <= | d. + - |

Completion

Complete each statement.

27. Using the following statement to create a variable is called _____ the variable.
`var myVariable;`
28. A(n) _____ is the specific category of information that a variable contains.
29. You create arrays by using the keyword _____ and the `Array()` constructor.
30. The `Array` class contains a single property, the _____ property, which returns the number of elements in an array.
31. A(n) _____ operator requires an operand before and after the operator.

Matching

Identify the letter of the choice that best matches the phrase or definition.

- | | |
|---------------------|------------------------|
| a. variable | f. identifier |
| b. index | g. operator precedence |
| c. postfix operator | h. floating-point |
| d. null | i. empty string |
| e. constructor | |

- ___ 32. The order in which operations in an expression are evaluated
- ___ 33. The name you assign to a variable
- ___ 34. A special function used as the basis for creating reference variables
- ___ 35. A number that contains decimal places or that is written in exponential notation
- ___ 36. Value a program stores in computer memory
- ___ 37. An element's numeric position within an array
- ___ 38. An empty value
- ___ 39. A zero-length string value
- ___ 40. Placed after a variable

Short Answer

41. What are the rules and conventions when naming a variable?
42. What are reserved words?
43. How is a variable's value displayed on the screen?
44. Regardless of whether you assign a value to a variable when it is declared, how can you change the variable's value at any point in a script?
45. JavaScript supports six primitive data types. Name and describe these types.

46. What is a reference type and what are the reference types supported by JavaScript?
47. Define the term expression and identify the components of an expression.
48. Identify and explain the unary arithmetic operators available in JavaScript.
49. JavaScript has two operators that can be used with strings: + and +=. Explain the results of applying these operators.
50. When using operators to create expressions in JavaScript, you need to be aware of the precedence of an operator. Explain the term operator precedence.

ch02

Answer Section

TRUE/FALSE

- | | | |
|-----------|--------|---------|
| 1. ANS: F | PTS: 1 | REF: 59 |
| 2. ANS: T | PTS: 1 | REF: 67 |
| 3. ANS: F | PTS: 1 | REF: 71 |
| 4. ANS: T | PTS: 1 | REF: 85 |
| 5. ANS: F | PTS: 1 | REF: 88 |

MULTIPLE CHOICE

- | | | |
|------------|--------|---------|
| 6. ANS: C | PTS: 1 | REF: 61 |
| 7. ANS: A | PTS: 1 | REF: 66 |
| 8. ANS: B | PTS: 1 | REF: 67 |
| 9. ANS: B | PTS: 1 | REF: 67 |
| 10. ANS: D | PTS: 1 | REF: 68 |
| 11. ANS: B | PTS: 1 | REF: 71 |
| 12. ANS: C | PTS: 1 | REF: 72 |
| 13. ANS: A | PTS: 1 | REF: 72 |
| 14. ANS: D | PTS: 1 | REF: 75 |
| 15. ANS: B | PTS: 1 | REF: 76 |
| 16. ANS: A | PTS: 1 | REF: 77 |
| 17. ANS: B | PTS: 1 | REF: 78 |
| 18. ANS: B | PTS: 1 | REF: 78 |
| 19. ANS: D | PTS: 1 | REF: 79 |
| 20. ANS: D | PTS: 1 | REF: 80 |
| 21. ANS: A | PTS: 1 | REF: 84 |
| 22. ANS: B | PTS: 1 | REF: 86 |
| 23. ANS: C | PTS: 1 | REF: 88 |
| 24. ANS: A | PTS: 1 | REF: 89 |
| 25. ANS: B | PTS: 1 | REF: 91 |
| 26. ANS: A | PTS: 1 | REF: 96 |

COMPLETION

- | | | |
|--------------------|--------|---------|
| 27. ANS: declaring | | |
| | PTS: 1 | REF: 61 |
| 28. ANS: data type | | |
| | PTS: 1 | REF: 66 |
| 29. ANS: new | | |

PTS: 1 REF: 72
30. ANS: length

PTS: 1 REF: 75
31. ANS: binary

PTS: 1 REF: 77

MATCHING

32. ANS: G PTS: 1 REF: 95
33. ANS: F PTS: 1 REF: 60
34. ANS: E PTS: 1 REF: 72
35. ANS: H PTS: 1 REF: 68
36. ANS: A PTS: 1 REF: 59
37. ANS: B PTS: 1 REF: 72
38. ANS: D PTS: 1 REF: 66
39. ANS: I PTS: 1 REF: 89
40. ANS: C PTS: 1 REF: 80

SHORT ANSWER

41. ANS:
Identifiers must begin with an uppercase or lowercase ASCII letter, dollar sign (\$), or underscore (_).
You can use numbers in an identifier, but not as the first character.
You cannot include spaces in an identifier.
You cannot use reserved words for identifiers.

PTS: 1 REF: 60

42. ANS:
Reserved words (also called keywords) are special words that are part of the JavaScript language syntax.

PTS: 1 REF: 60

43. ANS:
To print a variable (that is, display its value on the screen), you pass the variable name to the `document.write()` or `document.writeln()` method, but without enclosing it in quotation marks.

PTS: 1 REF: 62

44. ANS:
By using a statement that includes the variable's name, followed by an equal sign, followed by the value you want to assign to the variable.

PTS: 1 REF: 63

45. ANS:
Number: Positive or negative numbers with or without decimal places, or numbers written using exponential notation.
Boolean: A logical value of true or false.

String: Text such as "Hello World".

Undefined: A variable that has never had a value assigned to it, has not been declared, or does not exist.

Null: An empty value.

PTS: 1 REF: 66

46. ANS:

Reference, or composite, data types, can contain multiple values or complex types of information, as opposed to the single values stored in primitive data types. The three reference data types supported by the JavaScript language are functions, objects, and arrays.

PTS: 1 REF: 67

47. ANS:

An expression is a literal value or variable or a combination of literal values, variables, operators, and other expressions that can be evaluated by the JavaScript interpreter to produce a result. You use operands and operators to create expressions in JavaScript. Operands are variables and literals contained in an expression. A literal is a value such as a literal string or a number. Operators, such as the addition operator (+) and multiplication operator (*), are symbols used in expressions to manipulate operands.

PTS: 1 REF: 76

48. ANS:

Increment (++) increases an operand by a value of one.

Decrement (--) decreases an operand by a value of one.

Negation (-) returns the opposite value (negative or positive) of an operand.

PTS: 1 REF: 80

49. ANS:

The plus sign is known as the concatenation operator. The concatenation operator (+) is used to combine two strings. You can also use the compound assignment operator (+=) to combine two strings.

PTS: 1 REF: 90

50. ANS:

The term operator precedence refers to the order in which operations in an expression are evaluated.

PTS: 1 REF: 95