What is the difference between a size declarator and a subscript? The size declarator is used in a definition of an array to indicate the number of elements the array will have. A subscript is used to access a specific element in an array.
Look at the following array definition.
int values[10];
How many elements does the array have?
What is the subscript of the 1st element in the array?
What is the subscript of the last element in the array?
Assuming that an int uses 4 bytes of memory, how much memory does the array use? The array has 10 elements.
The subscript of the first element is 0.
The subscript of the last element is 9.
Using four-byte integers, this array uses 40 bytes of memory.
Why should a function that accepts an array as an argument, and processes that array, also accept an argument specifying the array's size? Because, with the array alone the function has no way of determining the number of elements it has.
Consider the following array definition:
int values[5] = {4, 7, 6, 8, 2};
What does each of the following statements display?
cout << values[4] << endl;
cout << (values[1] + values[3]) << endl;
cout << ++values[1] << endl; 2
14
8
How do you define an array without providing a size declarator? By providing an initialization list. The array is sized to hold the number of values in the list.
Look at the following array definition.
int numbers[5] = {1, 2, 3};
What value is stored in numbers[2]?
What value is stored in numbers[4]? 3
0
Assuming that array1 and array2 are both arrays, why is it not possible to assign the contents of array2 to array1 with the following statement?
array1 = array2; Because an array name without brackets and a subscript represents the array's beginning memory address. The statement shown attempts to assign the address of array2 to array1, which is not permitted.
Assuming that numbers is an array of doubles, will the following statement display the contents of the array?
cout << numbers << endl; No
Is an array passed to a function by value or by reference? Reference
When you pass an array name as an argument to a function, what is actually being passed?
The array's beginning memory address.

How do you establish a parallel relationship between two or more arrays? By using the same subscript value for each array.
Look at the following array definition.
double sales[8][10];
How many rows does the array have?
How many columns does the array have?
How many elements does the array have?
write a statement that stores a number in the last column of the last row of the array. Eight rows
Ten columns
Eighty elements
sales[7][9] = 123.45;
When writing a function that accepts two-dimensional arrays as an argument, which size declarator must you provide in the parameter for the array?The second size declarator, which is for the number of columns.
The _____ indicates the number of elements, or values an array can hold. size declarator
The size declarator must be a(n) _____ with a value greater than _____. integer, 0
Each element of an array is accessed and indexed by a number known as a_____.
subscript
Subscript numbering in C++ always starts at___. 0
The number inside the brackets of an array definition is the _____, but the number inside an array's bracket is an assignment statement, or any other statement that works with the contents of the array, is the_____. size declarator, subscript
C++ has no array _____ checking, which means you can inadvertently store data past the end of an array. bounds
Starting values for an array may be specified with an ____ list. initialization
If an array is partially initialized, the uninitialized elements will be set to___. 0
If the size declaratory of an array definition is omitted, C++ counts the number of items in the ____ to determine how large the array should be. initialization list
By using the same___ for multiple arrays, you can build relationships between the data stored in the arrays. subscript
You cannot use the ___ operator to copy data from one array to another in a single statement.
assignment (i.e. =)
Any time the name of an array is used without brackets and a subscript, it is seen as the____.
array's beginning memory address
To pass an array to a function, pass the _____ of the array. name
A_____ array is like several arrays of the same type put together. two-dimensional
It's best to think of a two-dimensional array as having_____and _____. rows, columns
To define a two-dimensional array, _____ size declarators are required. two
When initialization a two-dimensional array, it helps to enclose each row's initialization list in a _____. set of braces{}
When a two-dimensional array is passed to a function the ___ size must be specified. column
An array's size declarator can either be a literal, a named constant, or a variable. T

To calculate the amount of memory used by an array, multiply the number of elements by the number of bytes each element uses. T

The individual elements of an array are accessed and indexed by unique numbers. T, subscripts

The first element in an array is accessed by the subscript 1. F, 0

The subscript of the last element in a single-dimensional array is one less than the total number of elements in the array. T

The contents of an array element cannot be displayed with cout. T, must use a loop

Subscript numbers may be stored in variables. F

You can write programs that use invalid subscripts for an array. T, C++ has no bound checks, can accidentally cause the program to write past the end of an array.

Arrays cannot be initialized when they are defined. A loop or other means must be used. F, can be defined

The values in an initialization list are stored in the array in the order they appear in the list. T

C++ allows you to partially initialize an array. T

If an array is partially initialized, the uninitialized elements will contain "garbage". F

If you leave an element uninitialized, you do not have to leave all the ones that follow it uninitialized. F

If you leave out the size declarator of an array definition, you do not have to include an initialization list. F

The uninitialized elements of a string array will automatically be set to the value "0". F, set to empty strings

You cannot use the assignment operator to copy ones array's contents to another in a single statement. T

When an array name is used without brackets and a subscript, it is seen as the value of the first element in the array. F

To pass an array to a function, pass the name of the array. T

When defining a parameter variable to hold a single-dimensional array argument, you do not have to include the size declarator. F

When an array is passed to a function, the function has access to the original array. T

A two-dimensional array is like several identical arrays put together. T

It's best to think of two-dimensional arrays as having rows and columns. T

The first size declarator (in the declaration of a two-dimensional array) represents the number of columns. The second size definition represents the number of rows. F

Two-dimensional arrays may be passed to functions, but the row size must be specified in the definition of the parameter variable. F

C++ allows you to create arrays with three or more dimensions. T