

CRT

1. The index value of the third element is 2 (arrays are zero-indexed).

2. int[] quantities = new int[20];

3. double[] heights = {1.65, 2.15, 4.95};

4. for (int grade : grades) {

System.out.println(grade);

}

6. When a complete array is passed (arrays are passed by reference), the function has access to the entire array and can directly alter its elements. For primitive types, passing a single element just gives the method a copy of the element's value; thus, modifications to the element won't impact the original array.

7. When you need to change where an array's traversal or calculation begins, offset array indexes are applied. For instance, when setting up data, handling subarrays, or skipping early items, certain offsets (such as time zones or algorithm alignment) are important.

8. String name = "Elaine";

System.out.println(name.charAt(3));

_____ The output is i, as the character at index 3 of the string "Elaine" is i (zero-indexed).