

# CPSL 216 - Passing Arrays to Functions.

Recall → when we pass regular variables (int, float, string) to a function we just pass by value, i.e. it makes a copy of the variable in a separate place in memory.

For arrays, it's different !!!

Example:

```
function add Bonus (numbers, bonus) {  
    for (let i = 0; i < numbers.length; i++) {  
        numbers[i] += bonus;  
    }  
}
```

array      int  
    ↓          ↓

⋮  
let examScores = [79, 85, 60, 93];  
addBonus(examScores, 7);  
console.log(examScores);

What will happen?

→ 84, 90, 65, 98 !!!

So, when examScores was passed to the function, apparently scores was not just a copy !!!

Javascript actually creates a special "link" between the scores array and the examScores array, so that changes to one mean changes to the

Other.

This is called "pass by reference"

Summary:

int, float, string, bool  
→ pass by value

arrays, objects, maps  
→ pass by  
reference