

# JavaScript Number Variables Notes

## Overview

- **Number Variables:** Assign numbers to variables: `var weight = 150;`
- No quotes for numbers; quotes make it a string (e.g., "150" is not a number).
- **Math Operations:** Use variables in calculations: `weight + 25` evaluates to 175 if `weight = 150;`.

## Key Rules

- Numbers without quotes are not variables; numbers can't start variable names (e.g., `var 1st = 150;` is invalid).
- Strings (quoted numbers) can't be used for math (e.g., `"23" + 7` doesn't equal 30).
- Variables can hold numbers or strings, and their type can change: `var num = 23;`  
`num = "text";`

## Calculations

- Use variables in expressions: `var newNum = originalNum + numToBeAdded;`
- Update a variable using itself: `originalNum = originalNum + 10;`
- Mix variables and literal numbers: `var newNumber = originalNumber + 2;`

## Variable Naming

- Numbers allowed in names if not first: `var prezWhoCame_1st = "Washington";`
- Variable names don't denote type (number or string).

## Alerts

- Numbers or number variables in `alert()` are auto-converted to strings for display:
- Example: `alert(144);` or `var caseQty = 144; alert(caseQty);`