



JavaScript Exercises – Basics

Data Types and Operators

Duration: 1.5 hours

1. Write the expressions in JavaScript syntax for the following accounting equations (analyze the operation from the input and output) – use google if necessary:

- Cash flow ratio
Sample Input: cash: 1000, current liabilities: 500
Sample Output: 2
- Net income
Sample Input: revenues: 1000, expenses: 500
Sample Output: 500
- Total assets
Sample Input: liabilities: 1000, equity: 500
Sample Output: 1500
- Net income (using profit margin and sales)
Sample Input: profit: 1000, sales: 500
Sample Output: 500000
- Average
Sample Input: numbers: 7, 9, 2
Sample Output: 6
- Discount
Sample Input: price: 150, discount: 30%
Sample Output: 105
- Age limit (older than 18 and less than 30)
Sample Input: 20
Sample Output: true
- Exponential
Sample Input: number 1: 2, number 2: 3
Sample Output: 8
- Remainder
Sample Input: number 1: 10, number 2: 4
Sample Output: 2



2. Find the output for these expressions and justify the output according to JavaScript interpretation:

- `typeof(100)`
- `typeof(73.9)`
- `typeof(NaN)`
- `typeof("Water")`
- `typeof(false)`
- `typeof(9 != 11)`
- `"Orang" + "e"`
- `"Orange" - "s"`
- `"4" + "8"`
- `"4" - "8"`
- `"name" + 3`
- `"name" - 3`
- `82 * "word"`
- `1 + "hello"`
- `"hello" + 1`
- `1 + true`
- `"hello" + true`
- `typeof (Infinity)`
- `1 == '1'`
- `1 === '1'`

Strings

Duration: 15 minutes

1. Write the code to make this string "Welcome to Orange" outputted in the following forms using string methods:

- **Output:** WELCOME TO ORANGE
- **Output:** TO
- **Output:** Hello from Orange
- **Output:** welcome to orange
- **Output:** 17
- **Output:** Welcome to "Orange"
- **Output:** Welcome to Orange Jordan

2. Write the code that replaces all occurrences of the first letter of a string with '*'

Sample Input: cactus

Sample Output: ca*tus