01-math-operators.md 4/24/2022

Arithmatic Operators

- As the name suggests, the arithmatic operators are used to perform arithmatic operations.
- The arithmatic operators are:

```
Addition (+)
Subtraction (-)
Multiplication (*)
Division (/)
Modulus (%)
Exponentiation (**)
Increment (++)
```

o Decrement (--)

• The addition operator is used to add two numbers, just like

```
var a = 10;
var b = 20;
var sum = a + b;
document.write(sum);
```

document.write() is a function that is used to write text to the browser, in this case, it will write the sum of a and b to the browser.

• The subtraction operator is used to subtract two numbers, just like

```
var a = 10;
var b = 20;
var difference = a - b;
document.write(difference);
```

• The multiplication operator is used to multiply two numbers, just like

```
var a = 3;
var b = 5;
var multiply = a * b;
document.write(multiply);
```

• The division operator is used to divide two numbers, just like

```
var a = 10;
var b = 20;
```

01-math-operators.md 4/24/2022

```
var divide = a / b;
document.write(divide);
```

• The modulus operator is used to find the remainder of two numbers, just like

```
var a = 3;
var b = 5;
var modulus = a % b; // 3
document.write(modulus);
```

- The remainder of two numbers (a % b) is the number that remains after the division of a by b.
 - The exponentiation operator is used to raise a number to a power, just like

```
var a = 3;
var b = 5;
var exponent = a ** b; // 243
document.write(exponent);
```

• The increment operator is used to increment a number by 1, just like

```
var a = 10;
a++;
document.write(a); // 11
```

• The decrement operator is used to decrement a number by 1, just like

```
var a = 10;
a--;
document.write(a); // 9
```

Quiz Time!

• What is the value of answer after executing the following code?

```
var a = 10;

var b = 20;

var answer = a + (10 * b) / 2;
```

• Answer: answer = a + (10 * b) / 2 = 10 + 200 / 2 = 10 + 100 = 110