# JavaScript Exercises

## Numeric Operators & Expressions

int i;

int j = 6;

int k = 10;

|  |  |
| --- | --- |
| **Printing/Output** | **Result / Answer** |
| 1 + 2 - 3 \* 4 / 5 | 1 (Math's PEDMAS applies) |
| 3 / 2 | 1 (both int's) |
| 3 / 2.0 | 1.5 (auto-widening) |
| 3.0 / 2 | 1.5 (auto-widening) |
| 5 % 3 | 2 |
| 2 % 3 | 2 |
| (((k))) | 10 |
| k++ | 10 (increments afterwards) |
| ++k | 11 (increments first) |
| 7++ | Error: ++ operator can't be applied to a literal value. |
| k++ + ++j | 17 (10 + 7) |
| ++k + j++ | 17 (11 + 6) |
| ++k + ++j | 18 (11 + 7) |
| k+++++j | Error: missing space between concatenation of k++ and ++j. |
| k += 1 | 11 |
| k \*= 2 | 20 |

## String Operators & Expressions

String s = "helloworld";

String f = "1.5";

int i = 6;

|  |  |
| --- | --- |
| **Printing/Output** | **Result / Answer** |
| s | helloworld |
| s.length() | 10 |
| parseFloat(f) | 1.5 |
| i + s | 6helloworld |
| "x" + s + "x" + i | xhelloworldx6 |
| s.indexOf("l") | 2 |
| s.indexOf("X") | -1 |
| s.substring(0, 2) | he |
| s.substring(s.indexOf("low"), s.length()) | loworld |

|  |  |
| --- | --- |
| var a = parseFloat("10") | 10 |
| var b = parseFloat("10.00") | 10 |
| var c = parseFloat("10.33") | 10.33 |
| var d = parseFloat("34 45 66") | 34 |
| var e = parseFloat(" 60 ") | 60 |
| var f = parseFloat("40 years") | 40 |
| var g = parseFloat("He was 40") | NaN |

## Conditional Expressions

int n = 0;

int j = 7;

|  |  |
| --- | --- |
| **Printing/Output** | **Result / Answer** |
| if (j <= 4) {  n = 2;  } | 0 |
| if (3 < n || j > 4) {  n = 1;  } else {  n = 2;  } | 1 |
| if (j > n && n!=0) {  n = 1;  } else {  n = 2;  } | 2 |
| if (j > n) {  n = 1;  if (j > 4) {  n = 2;  } else {  n = 3;  }  } else {  n = 4;  if (j%3 == 2) {  n = 5;  } else {  n = 6;  }  } | 2 |
| while (j > ++n || n <= 15) {  n+=n;  } | 31 |
| while (j-->0 && ++n<10) {  n\*=2;  } | 15 |
| while (j-->0) {  ++n\*=2;  } | **Syntax error:**  Both "assignment + increment" can't be done together  ++n = n \* 2; |