

JavaScript

Ex1:

A)

```
var a = 10;  
var b = 5;  
var c = a + b;
```

What is the value of the variable c ? 15

B)

```
var num1 = 10;  
var num2 = 50;  
num1 *= 9;  
num2 /= num1;  
num1 = 5+10 *3-1;  
num2 = 9 * num1 ;  
num2 = num1 / 8 +2;
```

What is the value of the variable num1 and num2 ? num1 = 34 , num2 = 4.25

Ex2:

```
var number = 10;  
number ++ ;  
number ++;  
number += 5;  
number - - ;  
number *=2;
```

What is the value of the variable number ? 32

Ex3:

on every expression write true or false ?

True	$1 \leq 8 + 1$	
False	$(2 - 3 + 4) * (9 + 7) \ \&\& \ \text{false}$	
True	$10 + 18 \geq 3 \ \ \ 4 \leq 10$	
True	$10 == 10 \ \ \ 10 === 10$	
	$10 == 10 \ \&\& \ 20 == 30 \ \ \ 5 \% 2 == 1$	False
	$10 == 10 \ \ \ 20 == 30 \ \&\& \ 5 \% 2 == 1$	False
	$20 == 30 \ \ \ 10 == 10 \ \ \ 5 \% 2 == 0$	True
	$(33 > 20) \ \ \ (2 < 12) \ \&\& \ 10 \ \ \ 2 \leq 3 \ \&\& \ !\text{true}$	True
True	$\text{true} \ \&\& \ \text{true} \ \ \ \text{false} \ \ \ \text{true}$	
True	$\text{true} \ \&\& \ \text{false} \ \ \ 8 < 10 \ \&\& \ !\text{false}$	
True	$\text{true} \ \ \ \text{false} \ \&\& \ 5 \leq 9 \ \ \ 10 != 38$	
	$!\text{false} \ \ \ !\text{true} \ \&\& \ !\text{false} \ \&\& \ !\text{true}$	False
True	$(!10) \ \&\& \ (10) \ \ \ (!10) \ \&\& \ (10) \ \&\& \ 2 < 9 \ \ \ \text{true}$	
True	$(!\text{false}) \ \ \ (!10)$	

Ex 4:

Write on every expression what will be printed, below you can see the values of all the variables.

```
var A = 5;  
var B = 3;  
var C = 19;  
var D = -2;  
var X = 4;  
var Y = 1;
```

- (1) `(5*X)+2*((3+B)+4)`
- (2) `(5*(X*2)*3)*(B+4)`
- (3) `A == (B=5*5+Y)`
- (4) `A += (X+5+A-Y)`
- (5) `A != (C *= (-D+A))`
- (6) `A *= A+(7-X-D+3)`
- (7) `A %= D++`
- (8) `A %= ++D`
- (9) `(X++)*(A+C)+(A++)`
- (10) `A = A-- + X*(B<A)+Y*(B<C)+5%2`
- (11) `!(X-D+C)||D+B+A && D++`
- (12) `A&&C||!0&&A&&!D`
- (13) `((A&&B)||(!0&&C))&&!D || A || B && Y`
- (14) `((A&&C)||!0)&&(C&&(!D)) && !A || !B`

- 1: 40
- 2: 840
- 3: false
- 4: 18
- 5: true
- 6: 65
- 7: 1
- 8: 0
- 9: 101
- 10: 10
- 11: -2
- 12: 19
- 13: 5
- 14: false

Exercise 5:

Give value to the variable a, b, c, d in order that the if() **will be TRUE?**

Give value to the variable a, b, c, d in order that the if() **will be FALSE?**

if(a || b || c || d || false)

if(a == b || c <= d)

if (a <= c && c <= d || !b)

if (a != b || a < c && !c)

if (a != b || a <= c || a <= b || true)

if (a != b || a <= c || a < b || c == c)

if (a % b == 0 && c % d == 1)



Exercise 5 answers:

for true:

1. a = 1, b = 2, c = 0, d = 0
2. a = 3, b = 3, c = -2, d = 1
3. a = 0, b = 0, c = 1, d = 1
4. a = 5, b = 4, c = 3
5. a = 0, b = 1, c = 1
6. a = 0, b = -1, c = 0
7. a = 6, b = 2, c = 7, d = 6

for false:

1. a = 0, b = 0, c = 0, d = 0
2. a = 5, b = 4, c = 2, d = 3
3. a = 1, b = 1, c = 2, d = 3
4. a = 3, b = 3, c = 3
5. a = 1, b = 0, c = -1
6. a = 1, b = 0, c = 1
7. a = 10, b = 5, c = 7, d = 3