

$$A = 10, B = 20$$

operator name	Sign	
Assignment	=	$A = B, [A = 20]$
Addition	+	$A + B = 30$
Subtraction	-	$A - B = -10$
Multiplication	*	$A * B = 200$
Division	/	$B / A = 2$
Module	%	$B \% A = 0$

Arithmetic  
operator

Operator Name	Sign	$A = 10 ; B = 20$
equal	$==$	$(A == B)$ is not true
not equal	$!=$	$(A != B)$ is True
less than	$<$	$(A < B)$ is True
greater than	$>$	$(A > B)$ is not true
less than or equal to	$<=$	$(A <= B)$ is true
greater than or equal to	$>=$	$(A >= B)$ is not true

Comparison

A = 10 ; B = 20

Operator Name	Sign	
and (logical)	&&	(A && B) is True
OR (logical)		(A    B) is True
not	!	!(A && B) is False

Boolean  
Operator

# Bitwise Operator

operator

Sign

A = 6 ; B = 8

Binary and

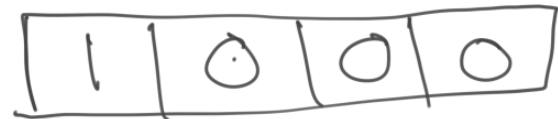
&

A & B = 0

A = 6



B = 8



A & B =



operator	Sign
binary or	1

$$A = 6, B = 8$$

$$(A \mid B) = 14$$

	8	4	2	1
A = 6	0	1	1	0
B = 8	1	0	0	0

---

A   B = 14	1	1	1	0
------------	---	---	---	---

Operation	Sign															
Binary XOR	$\wedge$	<div><math>A: 6, B: 8</math></div> <div><math>(A \wedge B) = 14</math></div> <div><div><math>A = 6</math><table><tr><td>0</td><td>1</td><td>1</td><td>0</td></tr></table></div><div><math>B = 8</math><table><tr><td>1</td><td>1</td><td>0</td><td>0</td><td>0</td></tr></table></div><div><math>A \wedge B = 14</math><table><tr><td>1</td><td>1</td><td>1</td><td>1</td><td>0</td></tr></table></div></div>	0	1	1	0	1	1	0	0	0	1	1	1	1	0
0	1	1	0													
1	1	0	0	0												
1	1	1	1	0												

Operator	sign
Binary not	$\sim$

$$A = 6,$$

$$\sim A = -6$$

$$A = 6 \quad \boxed{0 \mid 1 \mid 1 \mid 0}$$

$$\sim A = -6 \quad \boxed{1 \mid 0 \mid 0 \mid 1}$$

Operator	Sign
Right shift	>>

A = 6

A >> 2





operator	Sign	$A = 6$	
Left shift	$\ll$	$A \ll 2$	
		$A = 6$	<div>0110</div>
		$A \ll 2 =$	<div>00011000</div>