

## Operator Tables for Various C Standards

Current manpage operator table  
With Section numbers as listed in K&R, 1<sup>st</sup> edition

Operator	Associativity	Appendix A, Section #
1 () [] -> .	left to right	7.1
2 ! ~ ++ -- + - (type) * & sizeof	right to left	7.2
3 * / %	left to right	7.3
4 + -	left to right	7.4
5 << >>	left to right	7.5
6 < <= > >=	left to right	7.6
7 == !=	left to right	7.7
8 &	left to right	7.8
9 ^	left to right	7.9
10	left to right	7.10
11 &&	left to right	7.11
12	left to right	7.12
13 ?:	right to left	7.13
14 = += -= *= /= %= <<= >>= &= ^=  =	right to left	7.14
15 ,	left to right	7.15

### C 89 / 90

Operator	Associativity	Section
1 () [] -> . ++ -	left to right	6.3.2
2 ! ~ + - * & sizeof ++ -	right to left	6.3.3
3 (type)	right to left	6.3.4
4 * / %	left to right	6.3.5
5 + -	left to right	6.3.6
6 << >>	left to right	6.3.7
7 < <= > >=	left to right	6.3.8
8 == !=	left to right	6.3.9
9 &	left to right	6.3.10
10 ^	left to right	6.3.11
11	left to right	6.3.12
12 &&	left to right	6.3.13
13	left to right	6.3.14
14 ?:	right to left	6.3.15
15 = += -= *= /= %= <<= >>= &= ^=  =	right to left	6.3.16
16 ,	left to right	6.3.17

Level 1 ++ and - Postfix operators

Level 2 ++ and - Prefix operators

### C99

Operator	Associativity	Section
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## Operator Tables for Various C Standards

1	() [] -> . ++ -	left to right	6.5.2
2	! ~ + - * & sizeof ++ -	right to left	6.5.3
3	(type)	right to left	6.5.4
4	* / %	left to right	6.5.5
5	+ -	left to right	6.5.6
6	<< >>	left to right	6.5.7
7	< <= > >=	left to right	6.5.8
8	== !=	left to right	6.5.9
9	&	left to right	6.5.10
10	^	left to right	6.5.11
11		left to right	6.5.12
12	&&	left to right	6.5.13
13		left to right	6.5.14
14	?:	right to left	6.5.15
15	= += -= *= /= %= <<= >>= &= ^=  =	right to left	6.5.16
16	,	left to right	6.5.17

Level 1 ++ and - Postfix operators

Level 2 ++ and - Prefix operators

### C11 (Also C18)

Operator	Associativity	Section
1	() [] -> . ++ -	left to right 6.5.2
2	! ~ + - * & _Alignof sizeof ++ -	right to left 6.5.3
3	(type)	right to left 6.5.4
4	* / %	left to right 6.5.5
5	+ -	left to right 6.5.6
6	<< >>	left to right 6.5.7
7	< <= > >=	left to right 6.5.8
8	== !=	left to right 6.5.9
9	&	left to right 6.5.10
10	^	left to right 6.5.11
11		left to right 6.5.12
12	&&	left to right 6.5.13
13		left to right 6.5.14
14	?:	right to left 6.5.15
15	= += -= *= /= %= <<= >>= &= ^=  =	right to left 6.5.16
16	,	left to right 6.5.17

Level 1 ++ and - Postfix operators

Level 2 ++ and - Prefix operators

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