

## Alocarea tipurilor aritmetice în MS Visual C++

	Standard C++	Specific Microsoft C++		
Nr	Tipuri aritmetice	M	Domeniul de valori	Observatii
	INTREGI		<limits.h>	
1	<b>char</b>	1 B	-128,...,127 (implicit) sau 0,...,255 (cu optiunea /J)	
2	<b>signed char</b>	1 B	-128,...,127	
3	<b>unsigned char</b>	1 B	0,...,255	$2^8 = 256$
4	<b>short</b> = short int = signed short	2 B	-32 768,...,32767	
5	<b>unsigned short</b>	2 B	0,..., 65535 (0x 00 00,...,0x ff ff)	$2^{16} = 2^6 \cdot 2^{10} = 64\text{Kilo} = 65536$
6	<b>int</b> = signed int	4 B	-2 147 483 648,..., 2 147 483 647	
7	<b>unsigned int</b>	4 B	0,..., 4 294 967 295 (0x 00 00 00 00,...,0x ff ff ff ff)	$2^{32} = 4\text{Giga} = 4 294 967 296$
8	<b>long</b> = long int = signed long	4 B	exact ca <b>int</b>	
9	<b>unsigned long</b>	4 B	exact ca <b>unsigned int</b>	
10	<b>long long</b> = long long int	8B	-9 223 372 036 854 775 808, ... , 9 223 372 036 854 775 807	
11	<b>unsigned long long</b>	8B	0, ... , 18 446 744 073 709 551 615	$2^{64} = 2^4 \cdot 2^{60} = 16\text{Exa} \approx 16 \cdot 10^{18}$
	FLOTANTE		<float.h>	
12	<b>float</b>	4 B	$1.175494351\text{E-}38 <  x  < 3.402823466\text{E+}38$	Zero = $1.0\text{E-}07$
13	<b>double</b>	8 B	$2.2250738585072014\text{E-}308 <  x  < 1.7976931348623158\text{E+}308$	Zero = $2.0\text{E-}016$
14	<b>long double</b>	8 B	analog cu <b>double</b>	

Sursa: Microsoft Docs / Visual C++ / Documentation / C++ Language / Fundamental types  
(vezi <https://docs.microsoft.com/en-us/cpp/cpp/data-type-ranges>)