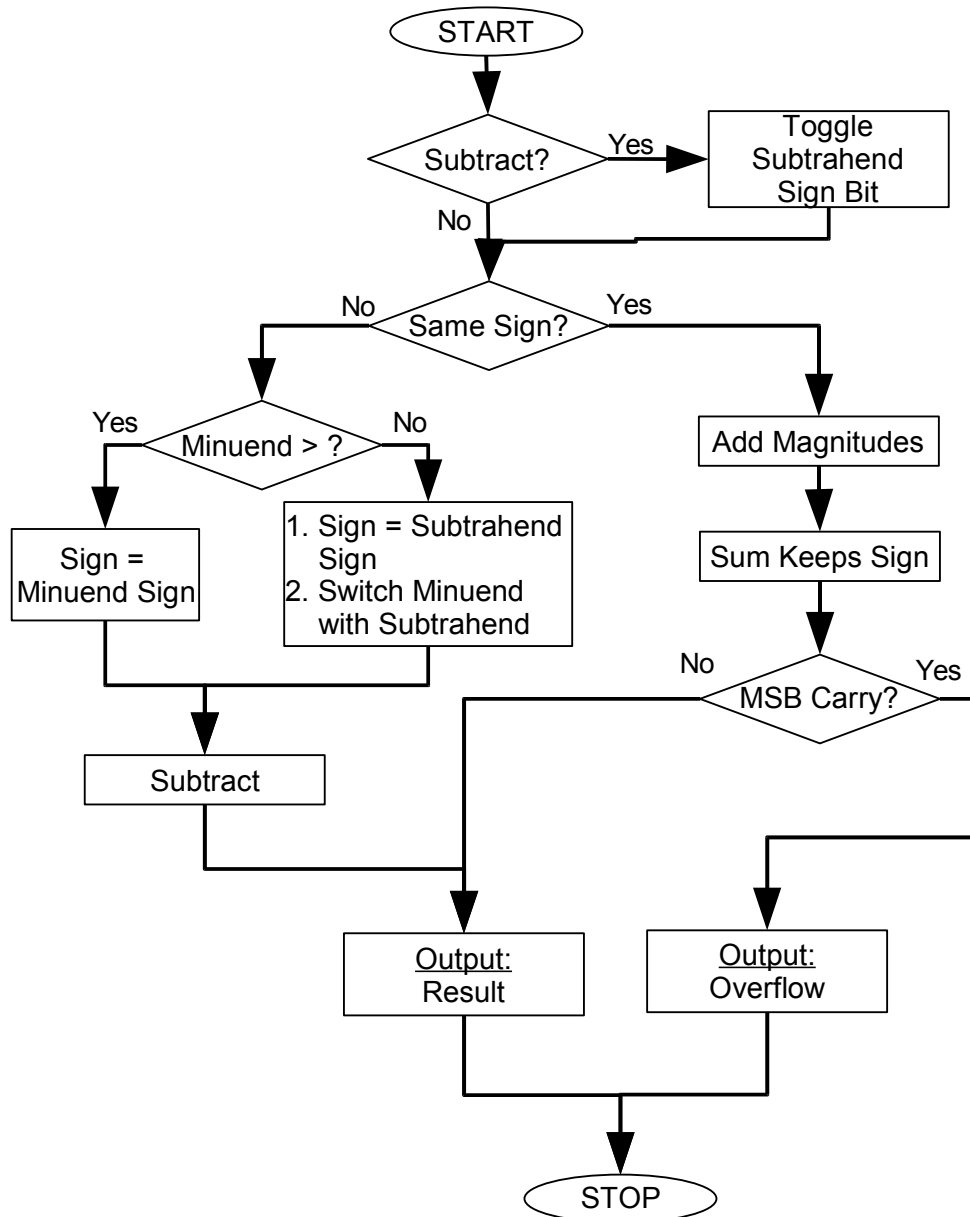


Signed Magnitude Addition – Subtraction Algorithm



Decimal and 4-bit Numbers

Decimal	Signed Magnitude	Ones' Complement	Two's Complement	Excess 2^{m-1}
7	0111	0111	0111	1111
6	0110	0110	0110	1110
5	0101	0101	0101	1101
4	0100	0100	0100	1100
3	0011	0011	0011	1011
2	0010	0010	0010	1010
1	0001	0001	0001	1001
0	0000 or 1000	0000 or 1111	0000	1000
-1	1001	1110	1111	0111
-2	1010	1101	1110	0110
-3	1011	1100	1101	0101
-4	1100	1011	1100	0100
-5	1101	1010	1011	0011
-6	1110	1001	1010	0010
-7	1111	1000	1001	0001
-8	—	—	1000	0000