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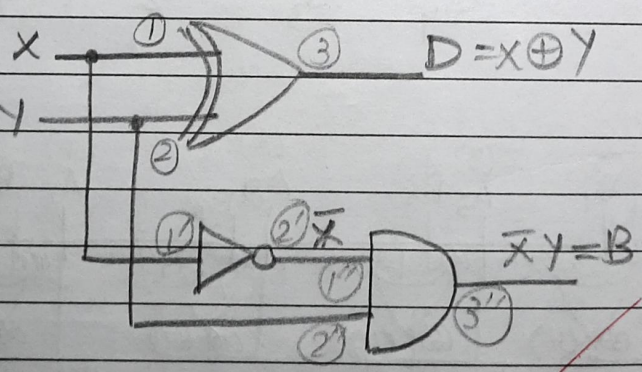
Half-subtractor (≥2 input gates)

X	Y	D	B
0	0	0	0
0	1	1	1
1	0	1	0
1	1	0	0

$D = \bar{X}Y + X\bar{Y} = X \text{ XOR } Y = X \oplus Y$

$B = \bar{X}Y$



(1 XOR gate
1 NOT gate
1 AND gate)

gurugubs
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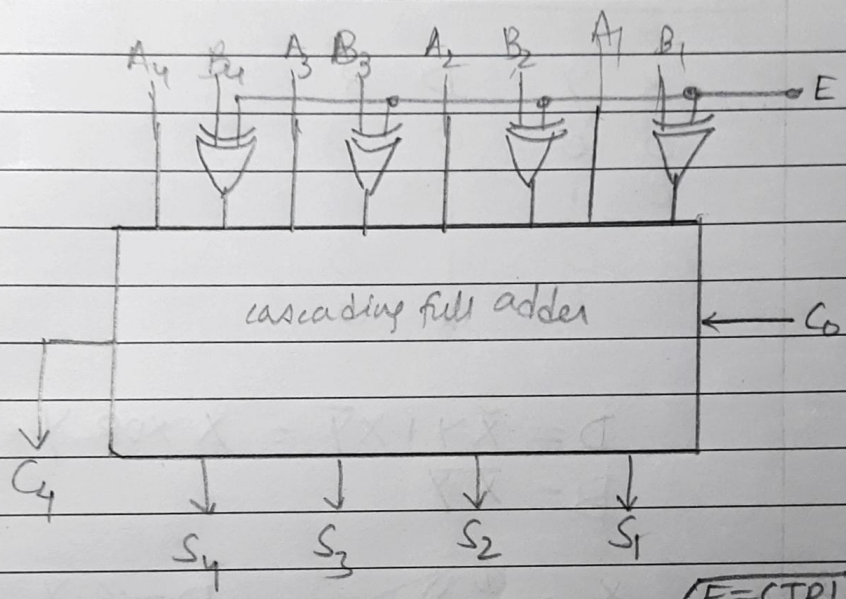
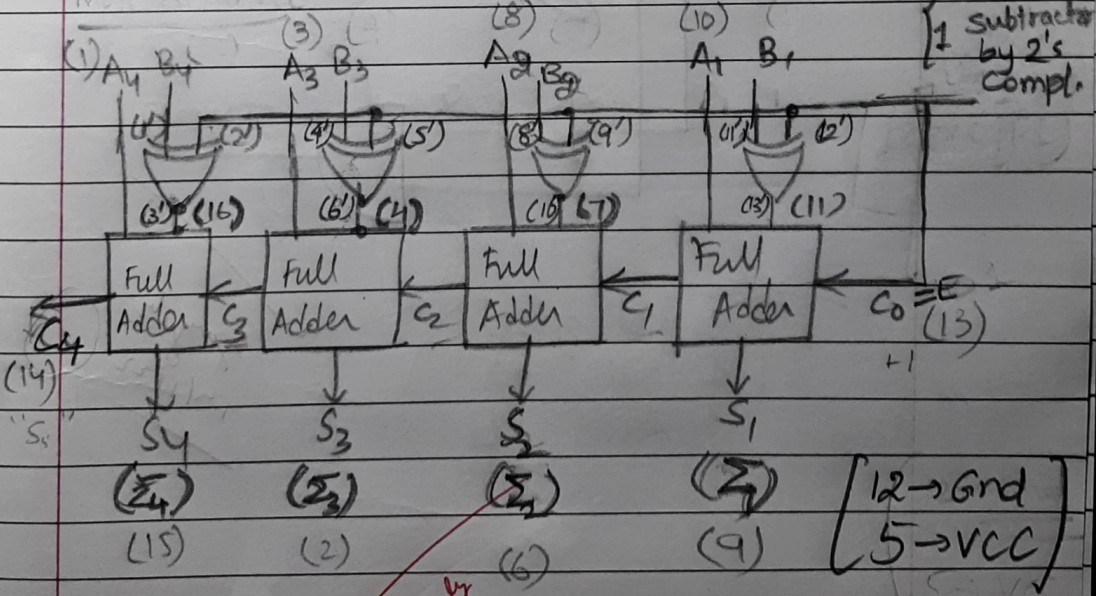
Adder/Subtractor using Full Adder



E=CTRL

E = 0 Adder
1 subtractor by 2's compl.



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A + 2's comp(B) = A − B