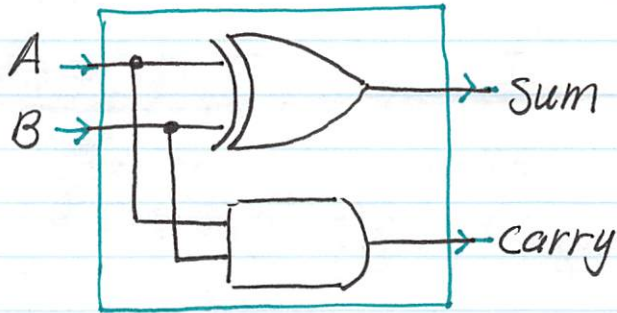


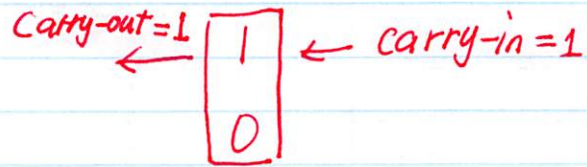
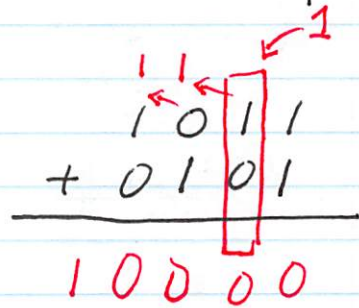
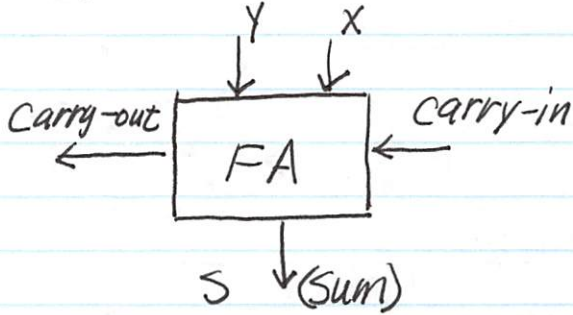
# Half Adder



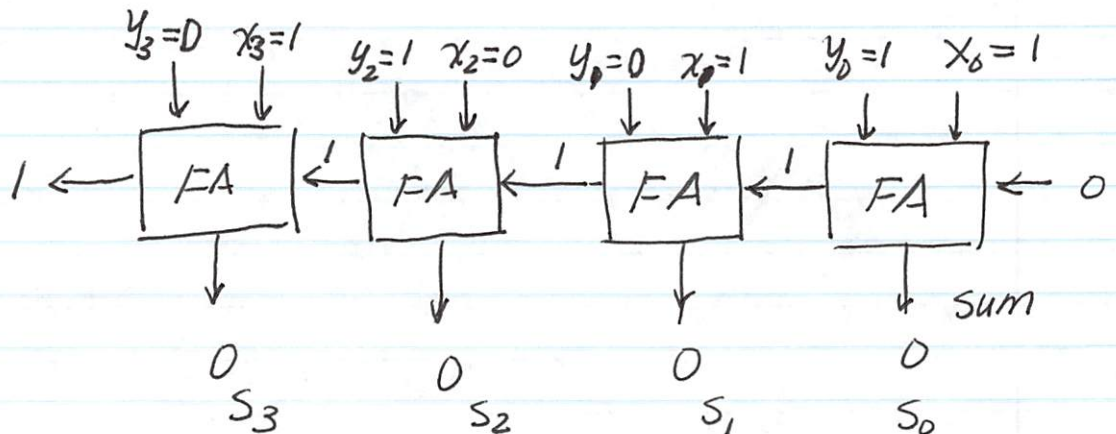
Example

1 (A)	1
+ 0 (B)	+ 1
<hr/>	
1 (Sum)	0 (sum)
carry=0	carry=1

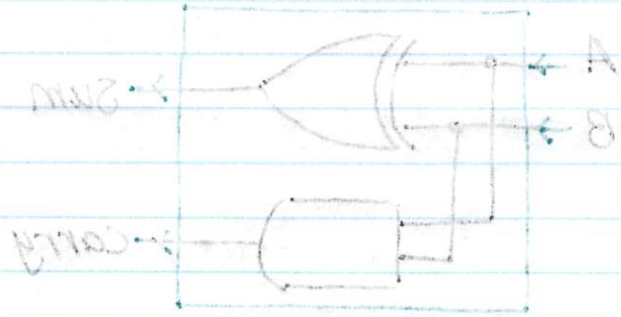
# Full Adder



	$x_3$	$x_2$	$x_1$	$x_0$	
X:	1	0	1	1	
+ Y:	0	1	0	1	
<hr/>					
S:	1	0	0	0	0 (sum)



# Half Adder



## Examples

1	1 (A)	1
+	0 (B)	0
	1 (sum)	1 (carry)

carry=0

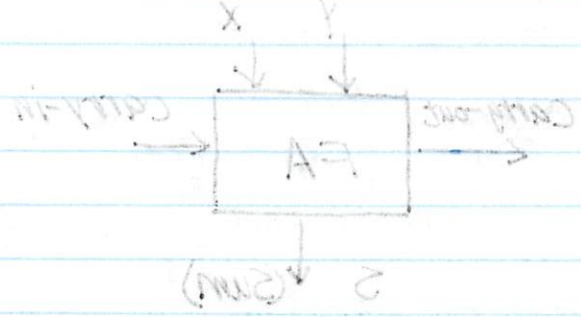
1	1	1
+	0	1
	1	0

carry=1

1	1	1
+	0	1
	1	0

carry-in=1

## Full Adder



1	1	1	1
+	0	1	0
	1	0	0

carry-in=1

