

①  $M_{\text{card}} = -1/4$

$M_{\text{plier}} = -3/4$

$+1/4 = 0.010$

$+3/4 = 0.110$

$-1/4 = 1.110$

$-3/4 = 1.010$

State	A	B	$f_n$
0	0000	1010	Load
1	0000 + 1110 ----- 1110	0101	Sh
2	1111	0010	Ad Sh
3	1111 + 0010 ----- 0001	1001	Sh
4	0000	1100	Cm Ad Sh
$0.001100 = +3/16$ ✓			

## ② BCD Adder

a)

$$\begin{array}{r} 8 \\ + 7 \\ \hline 15 \end{array}$$

$$\begin{array}{r} 1000 \\ + 0111 \\ \hline 1111 > 9 \\ + 0110 \\ \hline 10101 \\ \hline 1 \quad 0101 \\ 1 \quad 5 \checkmark \end{array}$$

b)

