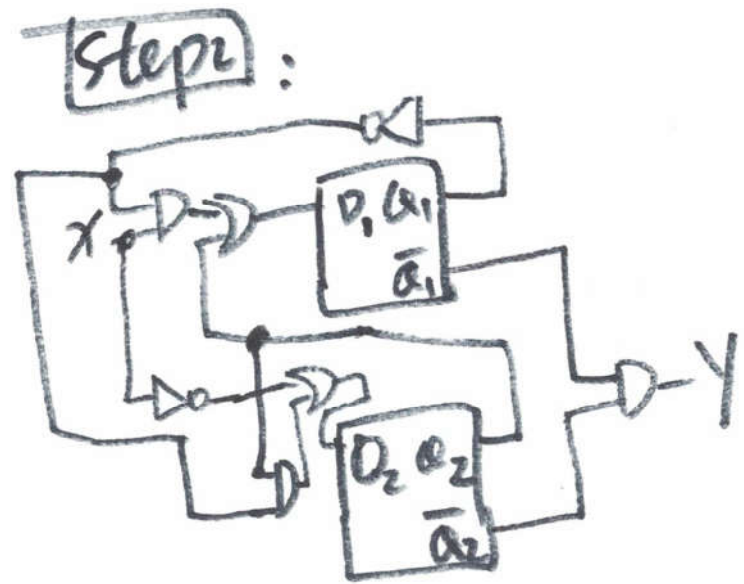
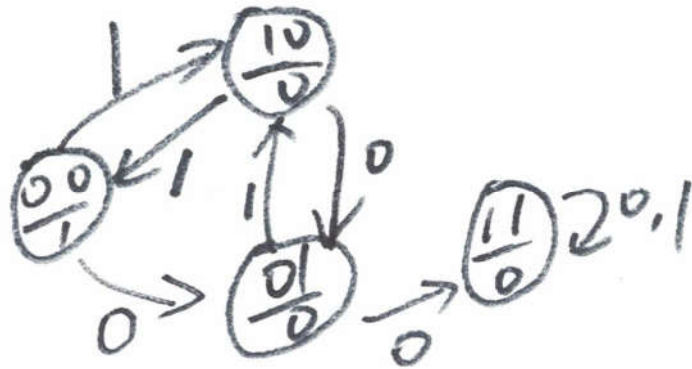


△ Diagram → Circuit



step 1:

x	Q ₁	Q ₂	Q ₁ '	Q ₂ '	Y	Y'
0	0	0	0	1	1	0
0	0	1	1	1	0	0
0	1	0	0	1	0	0
0	1	1	1	1	0	0
1	0	0	1	0	1	0
1	0	1	1	0	0	0
1	1	0	0	0	0	1
1	1	1	1	1	0	0

$$Q_1' = X\bar{Q}_1 + Q_2$$

x	Q ₁	Q ₂	00	01	11	10
0			0	1	1	0
1			1	1	1	0

$$Q_2' = \bar{X} + Q_1Q_2$$

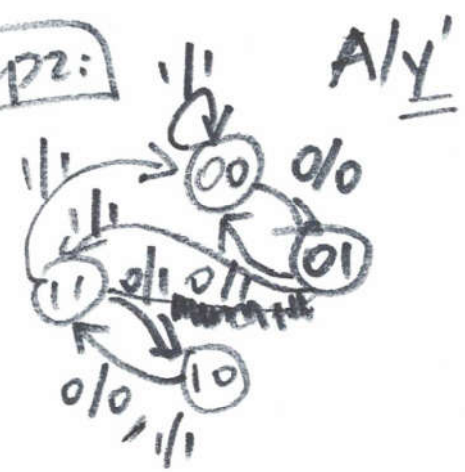
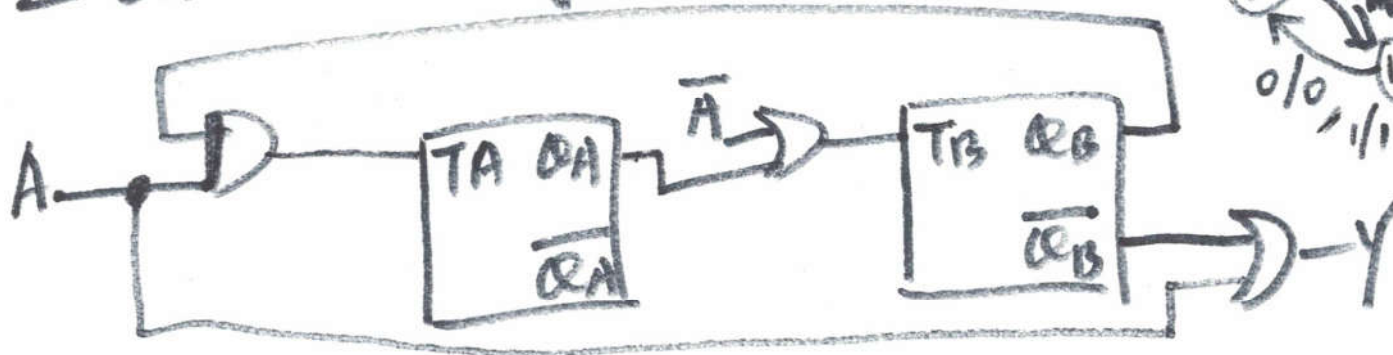
x	Q ₁	Q ₂	00	01	11	10
0			1	1	1	1
1			0	0	1	0

$$Y = \bar{Q}_1\bar{Q}_2$$

x	Q ₁	Q ₂	00	01	11	10
0			1	0	0	0
1			0	0	0	0

Examples: mealy machines

△ Circuit → Diagram



Step 1:

A	QA	QB	QA'	QB'	TA	TB	Y	Y'
0	0	0	0	1	0	1	1	0
0	0	1	0	0	0	1	0	1
0	1	0	1	1	0	1	1	0
0	1	1	1	0	0	1	0	1
1	0	0	0	0	0	0	1	1
1	0	1	1	1	1	0	1	1
1	1	0	1	0	0	1	1	1
1	1	1	0	0	1	1	1	1

QA:

TA	QA
0	QA
1	QA

QB:

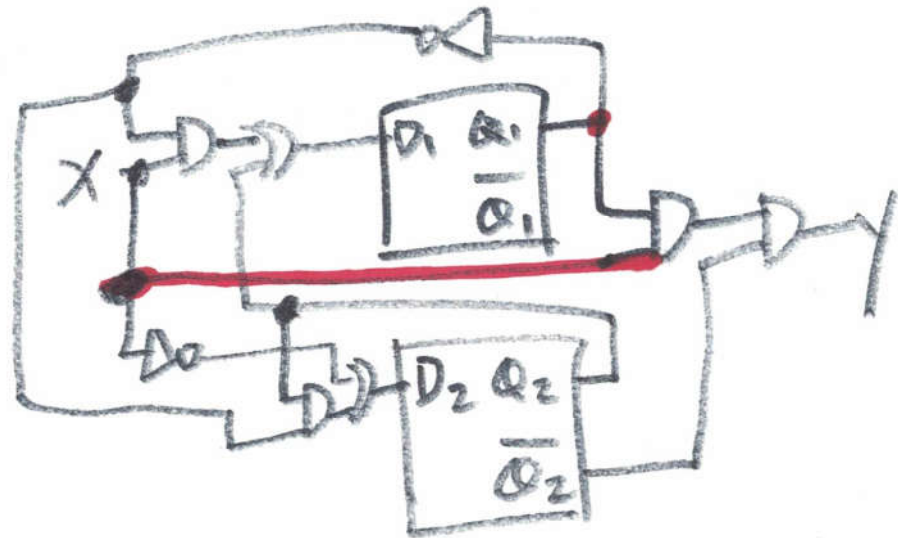
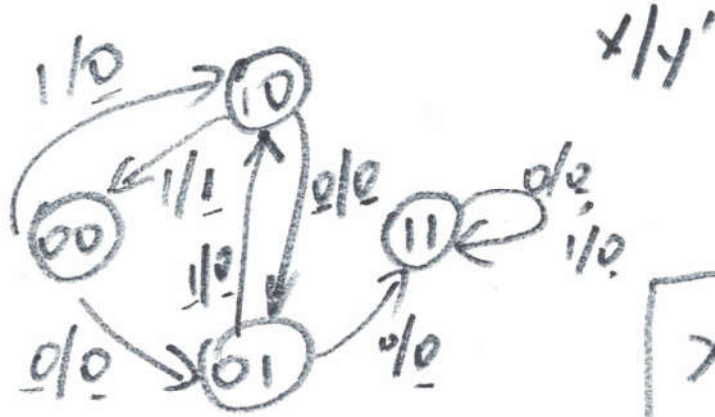
TB	QB
0	QB
1	QB

$$TA = A \cdot QB$$

$$TB = \bar{A} + QA$$

$$Y = A + \bar{QB}$$

$$Y' = A + \bar{QB'}$$



Step 1:

x	Q_1	Q_2	Q_1'	Q_2'	Y'
0	0	0	0	1	0
0	0	1	1	1	0
0	1	0	0	1	0
0	1	1	1	1	0
1	0	0	1	0	0
1	0	1	1	0	0
1	1	0	0	0	1
1	1	1	1	1	0

$$Q_1' = x\bar{Q}_1 + Q_2$$

$$Q_2' = \bar{x} + Q_1Q_2$$

$x \backslash Q_1 Q_2$

	00	01	11	10
0	0	1	1	0
1	1	1	1	0

$x \backslash Q_1 Q_2$

	00	01	11	10
0	1	1	1	1
1	0	0	1	0

$Y' = xQ_1\bar{Q}_2$

$x \backslash Q_1 Q_2$

	00	01	11	10
0	0	0	0	0
1	0	0	1	0

③

①