

$\{M_0, M_2, M_4, M_6\}$



w + x + y + z



w + x + y' + z



w + x' + y + z

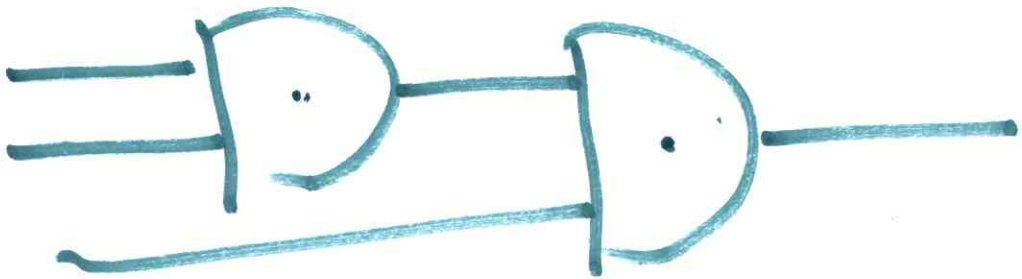


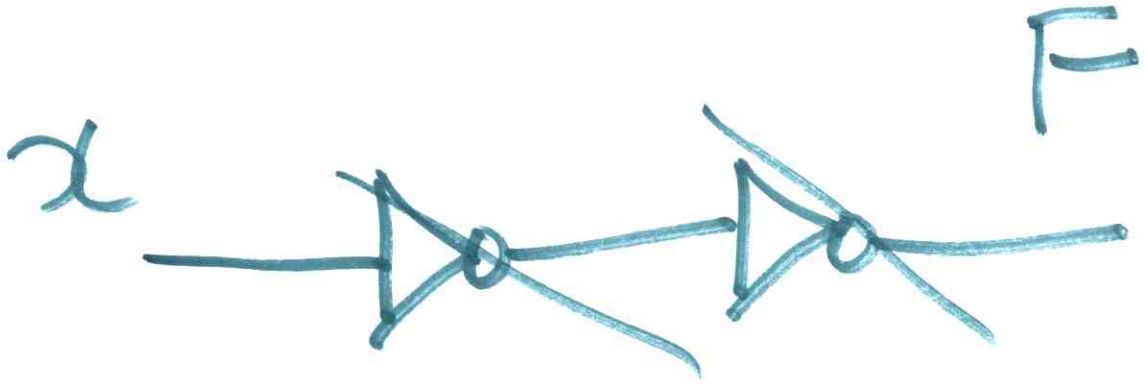
w + x' + y' + z

(w + z)



≡





$$\{m_1, m_3, m_9, m_{11}\}$$

1001
1011

$$\bar{x}z$$

$$\underbrace{\bar{w}\bar{x}\bar{y}z + \bar{w}\bar{x}yz}_{\text{}} + \underbrace{w\bar{x}\bar{y}z + w\bar{x}yz}_{\text{}}$$

$$= \bar{w}\bar{x}z(\bar{y}+y) + w\bar{x}z(\bar{y}+y)$$

$$= \bar{w}\bar{x}z + w\bar{x}z$$

$$= \bar{x}z(\bar{w}+w)$$

$$= \bar{x}z$$

1 —
2 —
3 —
4 —
5 —

1
10
11
100
101
3 bits

2 outputs