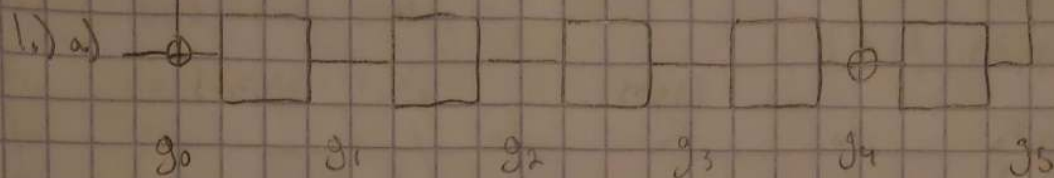


H/W 2



b) $i(x) = x^2$ $g(x) = x^5 + x^4 + 1 = 110001$

$A(x) = x^7$

$110001 /$

$$\begin{array}{r}
 111 \\
 100000000 \\
 11000100 \\
 \hline
 1000100 \\
 1100010 \\
 \hline
 100110 \\
 110001 \\
 \hline
 10111
 \end{array}$$

$B = 0010010111$

c.)

i.) $e = g(x) \cdot c(x)$ $c(x) = x+1$

$e = 110001 \cdot 11 =$

$$\begin{array}{r}
 1100010 \\
 + 110001 \\
 \hline
 1010011
 \end{array}$$

$= 0001010011$

ii.) $C = 101$

$$\begin{array}{r}
 e = 11000100 \\
 + 110001 \\
 \hline
 001110101
 \end{array}$$

110001

iii.) $C = 10001$

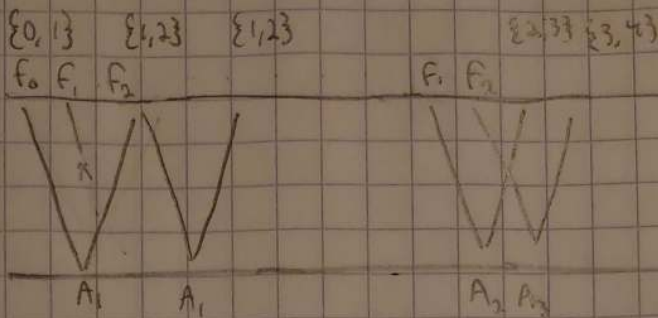
$$\begin{array}{r}
 110001 \\
 + 110001 \\
 \hline
 1100100001
 \end{array}$$

$e = 1100100001$

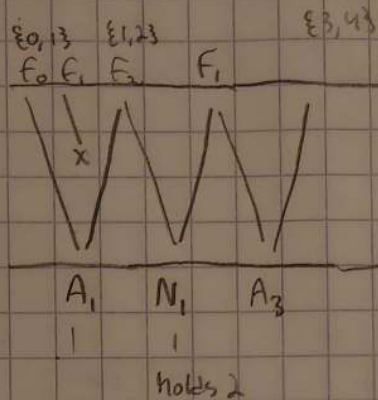
HW2

2)

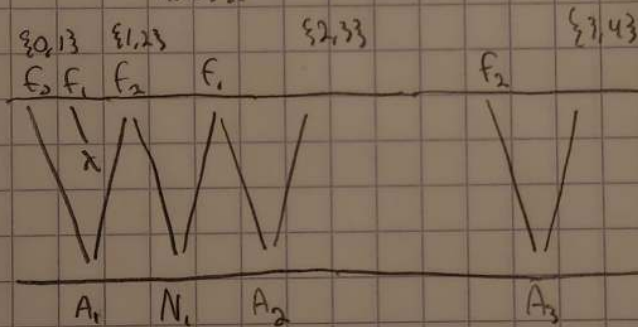
a) i.)



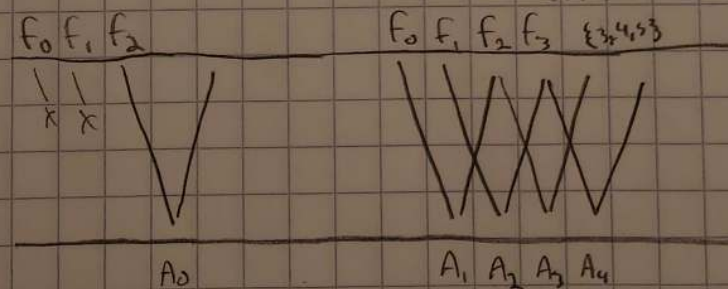
ii.)



iii.)



b) i.)



ii.)

