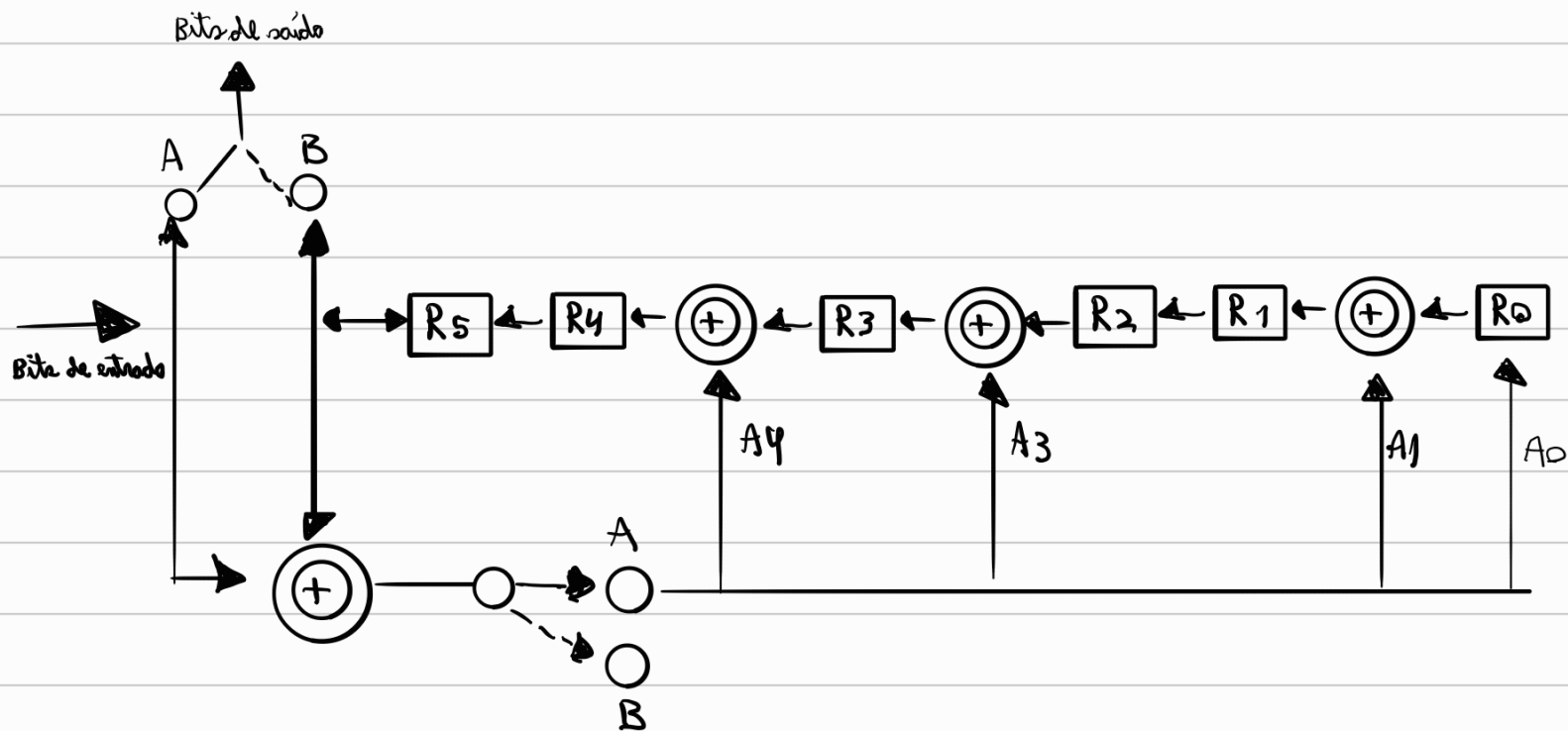


# LFSR Simplificado

- Polinômio gerador:  $x^6 + x^4 + x^3 + x + 1$ , logo:
- $A_6, A_4, A_3, A_1$  e  $A_0 = 1$ ;  $A_5$  e  $A_2 = 0$   
Ligados Desligados
- Vale lembrar que o  $A_6$  não aparece, mas, por ser o mais significativo, já está contido.



## Quadro com evolução LFSR

- Equações (Clock)

$$R_5^+ = R_4$$

$$R_4^+ = R_3 \oplus \underline{f}$$

$$R_3^+ = R_2 \oplus \underline{f}$$

$$R_2^+ = R_1$$

$$R_1^+ = R_0 \oplus \underline{f}$$

$$R_0^+ = \underline{f}$$

$$; \text{ Com } \underline{f} = R_5 \oplus R_3 \oplus R_1 \oplus R_0$$

Tabela gradual:

$x$	$I$	$F$	$R_5$	$R_4$	$R_3$	$R_2$	$R_1$	$R_0$
0	1	1	0	1	1	0	1	1
1	0	0	1	1	0	1	1	0
2	0	1	1	1	0	1	1	1
3	0	1	1	1	0	1	0	1
4	1	0	1	0	1	0	1	0
5	1	0	0	1	0	1	0	0
6	0	0	1	0	1	0	0	0
7	0	1	0	0	1	0	1	1
8	0	0	0	1	0	1	1	0
9	1	1	1	1	0	1	1	1
10	1	0	1	0	1	1	1	0
11	1	0	0	1	1	1	0	0
12	1	1	1	0	0	0	1	1
13	1	0	0	0	0	1	1	0
14	0	0	0	0	1	1	0	0
15	1	1	0	0	0	0	1	1
16	0	0	0	0	0	1	1	0
17	0	0	0	0	1	1	0	0
18	0	0	0	1	1	0	0	0
19	1	1	1	0	1	0	1	1
20	1	0	0	1	0	1	1	0
21	1	1	1	1	0	1	1	0
22	0	1	1	1	0	1	0	1
23	0	1	1	1	0	0	0	1
24	0	1	1	1	1	0	0	1
25	0	1	1	0	1	0	0	1
26	1	0	0	1	0	0	1	0

27	1	1	1	1	1	1	1	1
28	1	0	1	1	1	1	1	0
29	1	0	1	1	1	1	0	0
30	1	0	1	1	1	0	0	0
31	0	1	1	0	1	0	1	1

CRC encontrado em  $t=31 \rightarrow 101011$  ✓  
 CRC esperado segundo Q1  $\rightarrow 101011$  ✓

espero ter feito certo, deu trabalho!!

Match!