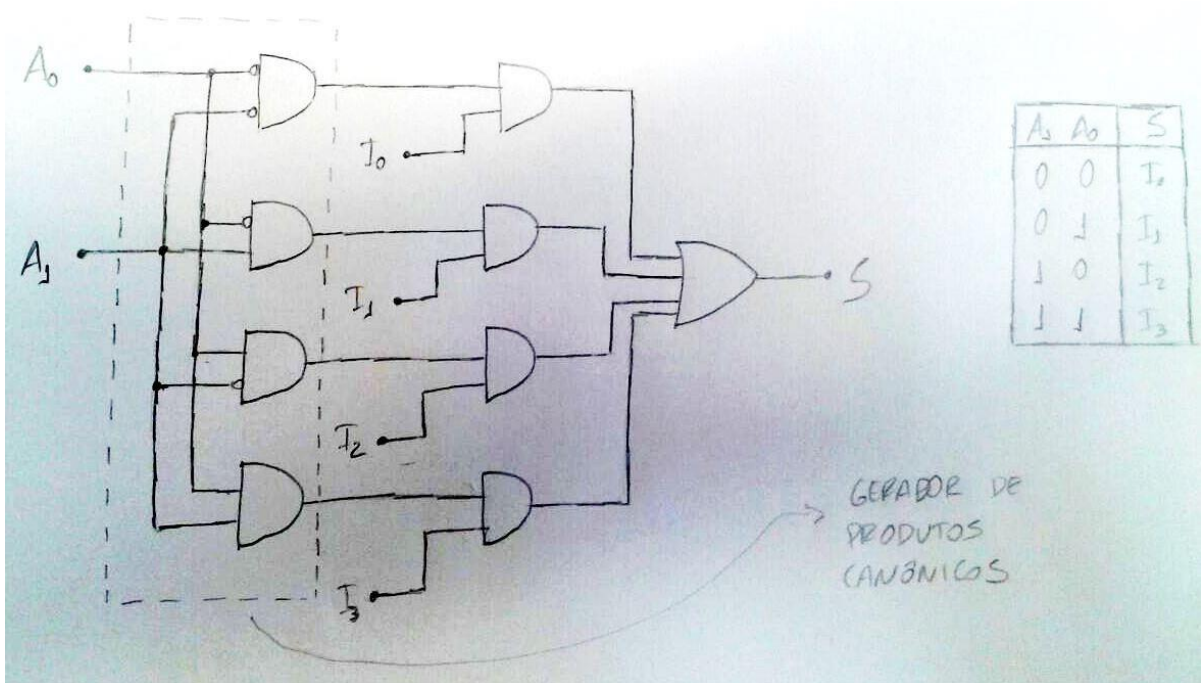


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Resolução Lista 8 - Multiplexadores

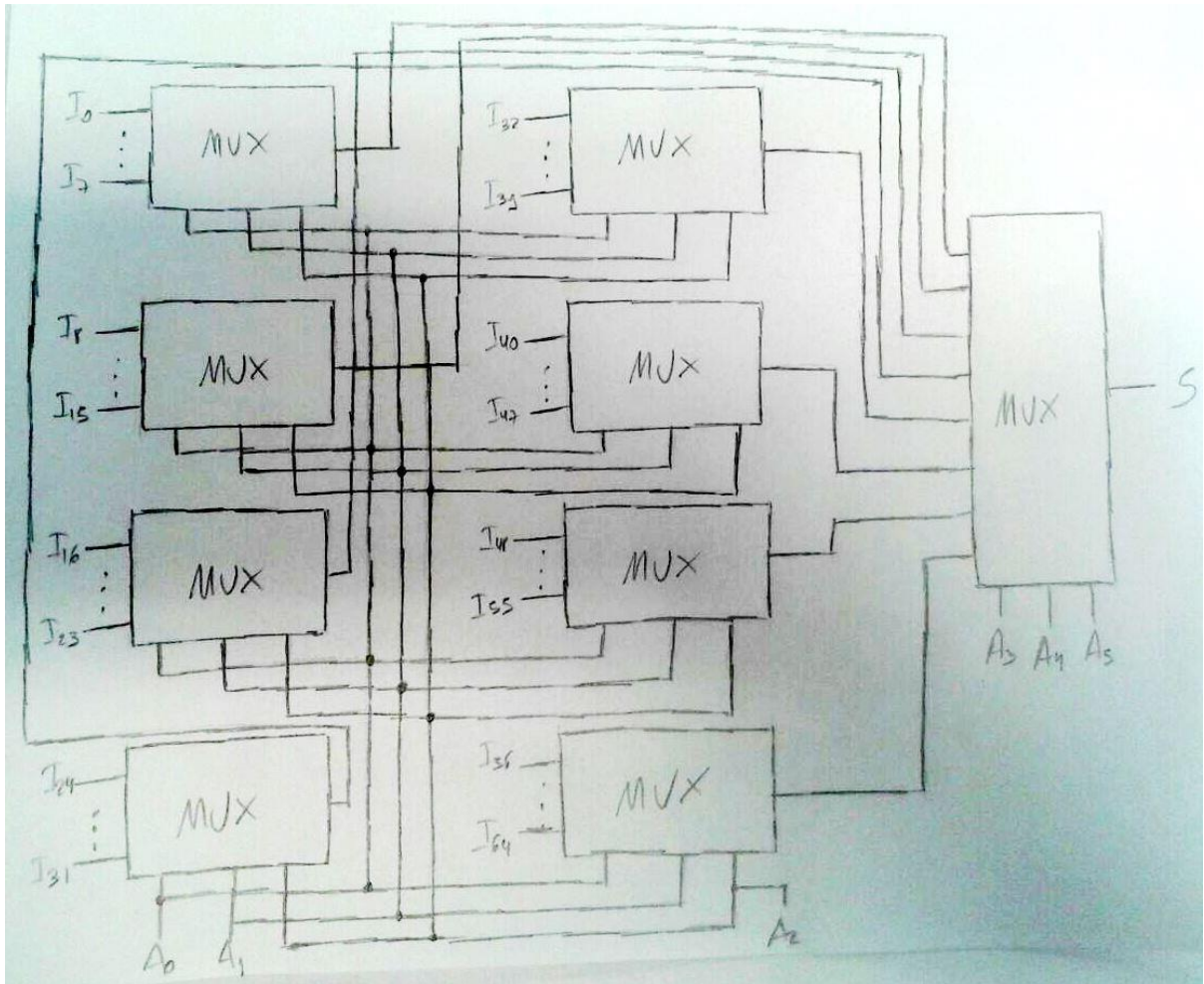
01



02

A resposta dessa questão se encontra no slide 12 da Aula 8.

03



04

a.

$G_3$	$G_2$	$G_1$	$G_0$	$B_3$	$B_2$	$B_1$	$B_0$
0	0	0	0	0	0	0	0
0	0	0	1	0	0	0	1
0	0	1	1	0	0	1	0
0	0	1	0	0	0	1	1

$G_3$	$G_2$	$G_1$	$G_0$	$B_3$	$B_2$	$B_1$	$B_0$
0	1	1	0	0	1	0	0
0	1	1	1	0	1	0	1
0	1	0	1	0	1	1	0
0	1	0	0	0	1	1	1

$G_3$	$G_2$	$G_1$	$G_0$	$B_3$	$B_2$	$B_1$	$B_0$
1	1	0	0	1	0	0	0
1	1	0	1	1	0	0	1
1	1	1	1	1	0	1	0
1	1	1	0	1	0	1	1

$G_3$	$G_2$	$G_1$	$G_0$	$B_3$	$B_2$	$B_1$	$B_0$
1	0	1	0	1	1	0	0
1	0	1	1	1	1	0	1
1	0	0	1	1	1	1	0
1	0	0	0	1	1	1	1

$G_3 \backslash G_2$	00	01	11	10
00	0	0	0	0
01	0	0	0	0
11	1	1	1	1
10	1	1	1	1

$$B_3 = G_3$$

$G_3 \backslash G_2$	00	01	11	10
00	0	0	0	0
01	1	1	1	1
11	0	0	0	0
10	1	1	1	1

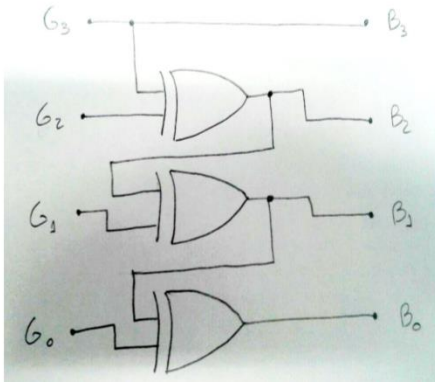
$$B_2 = \overline{G_3}G_2 + G_3\overline{G_2} = G_3 \oplus G_2$$

$G_3 \backslash G_2$	00	01	11	10
00	0	0	1	1
01	1	1	0	0
11	0	0	1	1
10	1	1	0	0

$$B_1 = \overline{G_3}\overline{G_2}G_1 + \overline{G_3}G_2\overline{G_1} + G_3G_2G_1 + G_3\overline{G_2}\overline{G_1} = \overline{G_3}(G_2 \oplus G_1) + G_3(\overline{G_2} \oplus \overline{G_1}) = G_3 \oplus G_2 \oplus G_1$$

$G_3 \backslash G_2$	00	01	11	10
00	0	1	0	1
01	1	0	1	0
11	0	1	0	1
10	1	0	1	0

$$B_0 = \overline{G_3}\overline{G_2}\overline{G_1}G_0 + \overline{G_3}\overline{G_2}G_1\overline{G_0} + \overline{G_3}G_2\overline{G_1}\overline{G_0} + \overline{G_3}G_2G_1G_0 + G_3G_2\overline{G_1}G_0 + G_3G_2G_1\overline{G_0} + G_3\overline{G_2}\overline{G_1}\overline{G_0} + G_3\overline{G_2}G_1G_0 = \overline{G_3}\overline{G_2}(G_1 \oplus G_0) + \overline{G_3}G_2(G_1 \oplus G_0) + G_3G_2(G_1 \oplus G_0) + G_3\overline{G_2}(G_1 \oplus G_0) = (G_1 \oplus G_0)(\overline{G_3} \oplus G_2) + (G_1 \oplus G_0)(G_3 \oplus G_2) = G_3 \oplus G_2 \oplus G_1 \oplus G_0$$



**b.**

A solução dessa questão se encontra a partir do slide 23 da Aula 7.

**05**

A resposta dessa questão se encontra no slide 18 da Aula 8.