

کویز سو

99443148

سارا مودزاده

$$A = a_3 a_2 a_1 a_0$$

$$\begin{array}{r}
 A \times 1 \\
 0001 \\
 \times a_3 a_2 a_1 a_0 \\
 \hline
 000a_0 \\
 000a_1 0 \\
 + \\
 000a_2 00 \\
 + \\
 000a_3 000 \\
 + \\
 \hline
 000a_3 a_2 a_1 a_0 \\
 \hline
 p_3 p_2 p_1 p_0
 \end{array}$$

$$A \times 2$$

$$\begin{array}{r}
 0010 \\
 \times a_3 a_2 a_1 a_0 \\
 \hline
 00a_0 0 \\
 00a_1 00 + \\
 00a_2 000 + \\
 00a_3 0000 + \\
 \hline
 00a_3 a_2 a_1 a_0 0 \\
 \hline
 3 \quad 2 \quad 1 \quad 0
 \end{array}$$

سوال اول

$$A \times 3$$

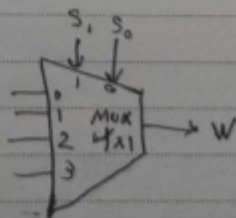
$$\begin{array}{r}
 0011 \\
 \times a_3 a_2 a_1 a_0 \\
 \hline
 00a_0 a_0 \\
 00a_1 a_0 + \\
 00a_2 a_1 a_0 + \\
 00a_3 a_2 a_1 a_0 + \\
 \hline
 00a_3 a_3 0000 + \\
 \hline
 00a_3 a_3 a_2 a_1 a_0 \\
 \hline
 3 \quad 3 \quad 2 \quad 1 \quad 0
 \end{array}$$

$$A \times 4$$

$$\begin{array}{r}
 0100 \\
 \times a_3 a_2 a_1 a_0 \\
 \hline
 0a_0 00 \\
 0a_1 000 + \\
 0a_2 0000 + \\
 0a_3 00000 + \\
 \hline
 0a_3 a_3 a_2 a_1 a_0 00 \\
 \hline
 3 \quad 2 \quad 1 \quad 0
 \end{array}$$

حال سیستم با استفاده از مالتی پلکسور

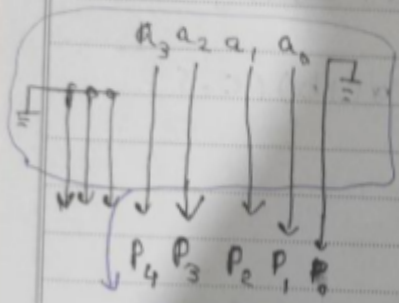
Full adder مدار خود را بنویسید



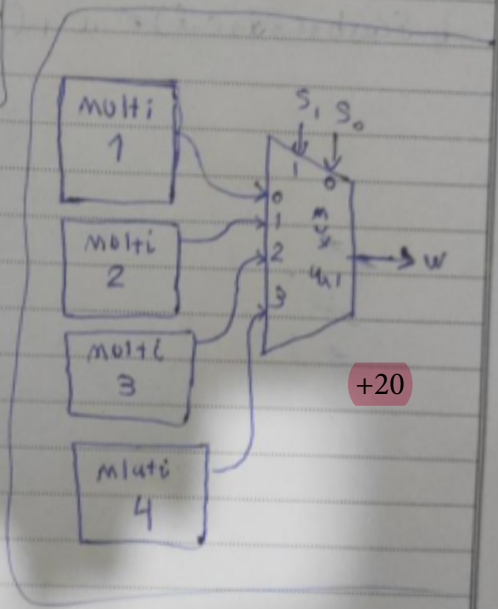
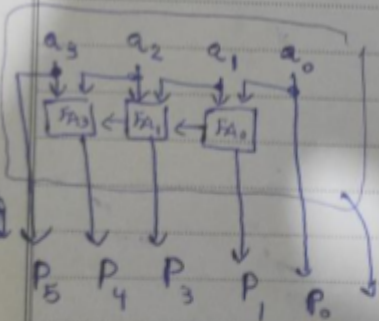
S_1, S_0	W
00	A
01	2A
10	3A
11	4A

مسئله 1 (1)

Multi 1 $\rightarrow a_3 a_2 a_1 a_0$ یعنی A
 طرح

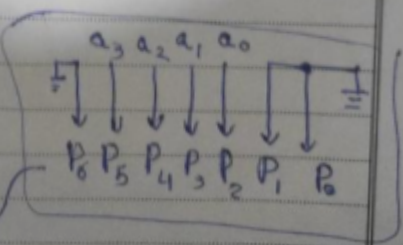


Multi 2



+20

Multi 3



Multi 4

سازمان