

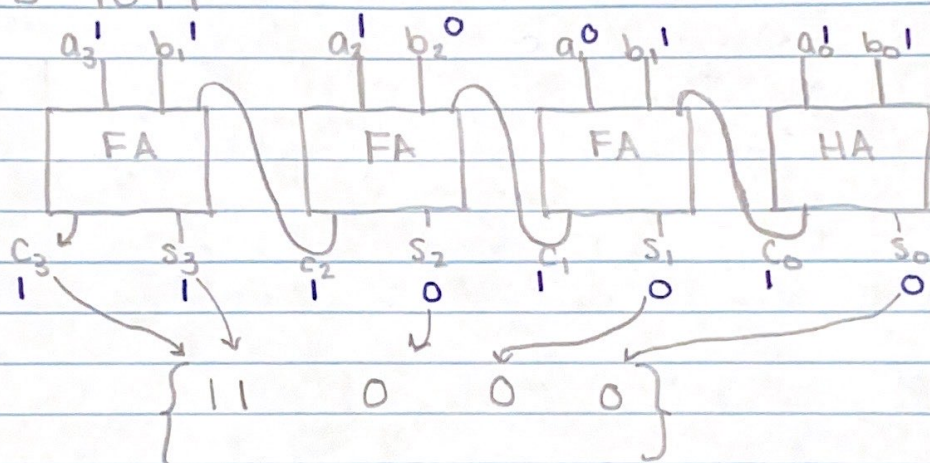
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Elec 2200

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Hw 15

1. 
$$\begin{array}{r} \phantom{0}1101 \\ + 1011 \\ \hline 11000 \end{array}$$
  
Carry      Sum

2. 
$$\begin{array}{r} A \ 1101 \\ + B \ 1011 \end{array}$$





3.	A	B	C	D	
0	0	0	0	0	1
1	0	0	0	1	d
✓ 2	0	0	1	0	0
3	0	0	1	1	1
✓ 4	0	1	0	0	0
✓ 5	0	1	0	1	0
6	0	1	1	0	1
7	0	1	1	1	1
✓ 8	1	0	0	0	0
✓ 9	1	0	0	1	0
10	1	0	1	0	d
11	1	0	1	1	d
12	1	1	0	0	1
13	1	1	0	1	1
14	1	1	1	0	1
15	1	1	1	1	d

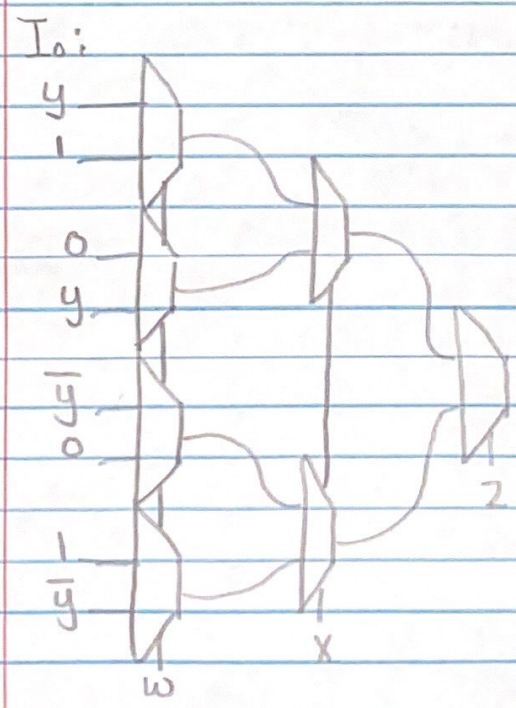
$y \backslash x$	00	01	11	10
00	1 <sup>0</sup>	0 <sup>4</sup>	1 <sup>12</sup>	0 <sup>8</sup>
01	d <sup>1</sup>	0 <sup>5</sup>	1 <sup>13</sup>	0 <sup>9</sup>
11	1 <sup>3</sup>	1 <sup>7</sup>	d <sup>15</sup>	d <sup>11</sup>
10	0 <sup>2</sup>	1 <sup>6</sup>	1 <sup>14</sup>	d <sup>10</sup>

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

$$I_0 = (\bar{w} + x + \bar{y})(\bar{x} + y + \bar{z})$$

$$\bar{w}y + xy + \bar{y}\bar{x} + \bar{y}\bar{z}$$

$$I_1 = (w + \bar{x} + \bar{y})$$





$I_0:$

