

Use the inputs of the 3 to 8 decoder (non-inverting outputs) as the address for ROM for a lookup table (LUT) implementation of the following functions.

Indicate which digits in the ROM should be stored as “1” by drawing an “x” at the appropriate intersecting lines in the figure below. Your figure should specify the programming for the ROM similar to how it is shown on slide 6 of the February 20 lecture or in Figure 9-27 in the textbook.

$$L_2(A, B, C) = AB'C + A'BC'$$

$$L_1(A, B, C) = AC + BC$$

$$L_0(A, B, C) = C'$$

$$R_2(A, B, C) = AB + B'C' + A'C$$

$$R_1(A, B, C) = B + A'C$$

$$R_0(A, B, C) = AC' + BC'$$

	00	01	11	10
0		1		
1				1

	00	01	11	10
0				
1		1	1	1

	00	01	11	10
0	1	1	1	1
1				

m_0	m_2	m_6	m_4
m_1	m_3	m_7	m_5

	00	01	11	10
0	1		1	1
1	1	1	1	

	00	01	11	10
0		1	1	
1	1	1	1	

	00	01	11	10
0		1	1	1
1				

