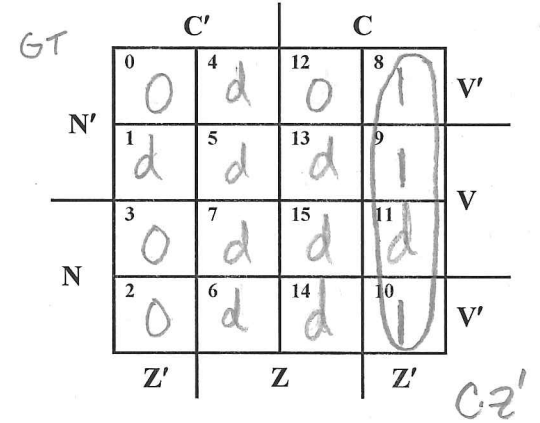
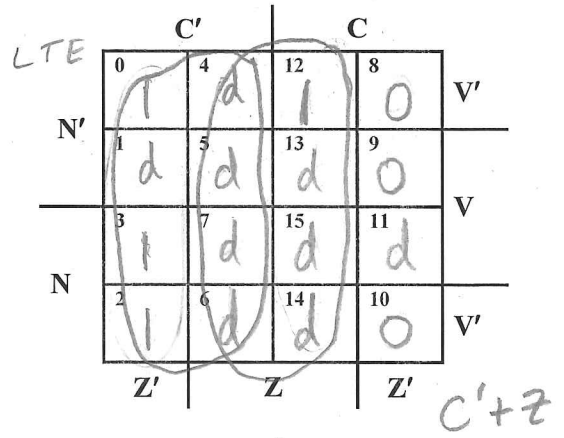


Practice Quiz 12

The following chart applies to the questions on this quiz.

A ₁	A ₀	B ₁	B ₀	?	C	Z	N	V
0	0	0	0	(A) = (B)				
0	0	0	1	(A) < (B)	0	0	1	0
0	0	1	0	(A) < (B)	0	0	1	1
0	0	1	1	(A) < (B)	0	0	0	0
0	1	0	0	(A) > (B)	1	0	0	0
0	1	0	1	(A) = (B)				
0	1	1	0	(A) < (B)	0	0	1	1
0	1	1	1	(A) < (B)	0	0	1	1
1	0	0	0	(A) > (B)	1	0	1	0
1	0	0	1	(A) > (B)	1	0	0	1
1	0	1	0	(A) < (B)	0	0	1	0
1	1	0	0	(A) > (B)	1	0	1	0
1	1	0	1	(A) > (B)	1	0	1	0
1	1	1	0	(A) > (B)	1	0	0	0
1	1	1	1	(A) = (B)				



- The "blank entries" should be filled in with the binary combination:

(A) 0100 (B) 0110 (C) 1000 **(D) 1100** (E) none of these
- The type of magnitude comparator depicted in this chart is:

(A) sign and magnitude (B) signed radix **(C) unsigned** (D) none of these
- The function for "A equals B" ($F_{A=B}$) can be expressed as:

(A) $F_{A=B} = C$ **(B) $F_{A=B} = Z$** (C) $F_{A=B} = N$ (D) $F_{A=B} = V$ (E) none of these
- The function for "A less than or equal to B" ($F_{A \leq B}$) can be expressed as:

(A) $F_{A \leq B} = C \cdot Z'$
(B) $F_{A \leq B} = C' + Z$
 (C) $F_{A \leq B} = N' \cdot V + N \cdot V'$
 (D) $F_{A \leq B} = N' \cdot V' + N \cdot V$
 (E) none of the above
- The function for "A greater than B" ($F_{A > B}$) can be expressed as:

(A) $F_{A > B} = C \cdot Z'$
 (B) $F_{A > B} = C' + Z$
 (C) $F_{A > B} = N' \cdot V + N \cdot V'$
 (D) $F_{A > B} = N' \cdot V' + N \cdot V$
 (E) none of the above