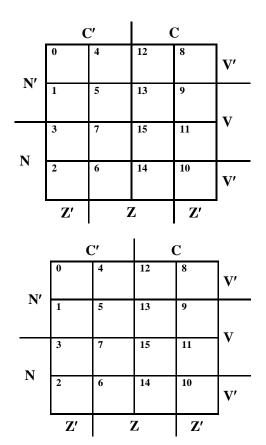
Practice Quiz 12

The following chart applies to the questions on this quiz.										
	A ₁	A ₀	B ₁	B ₀	?	С	Ζ	Ν	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)					
	1	0	1	1	(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)					



(E) none of these

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

(A) 0100 (B) 0110 (C) 1000 (D) 1100

2. The type of magnitude comparator depicted in this chart is:

- (A) sign and magnitude (B) signed radix (C) unsigned (D) none of these
- 3. 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
- 4. The function for "A less than or equal to B" ($F_{A \le B}$) can be expressed as:
 - (A) $F_{A \le B} = C \cdot Z'$
 - (B) $F_{A \le B} = C' + Z$
 - (C) $F_{A \le B} = N' \cdot V + N \cdot V'$
 - (D) $F_{A \leq B} = N' \cdot V' + N \cdot V$
 - (E) none of the above
- 5. 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