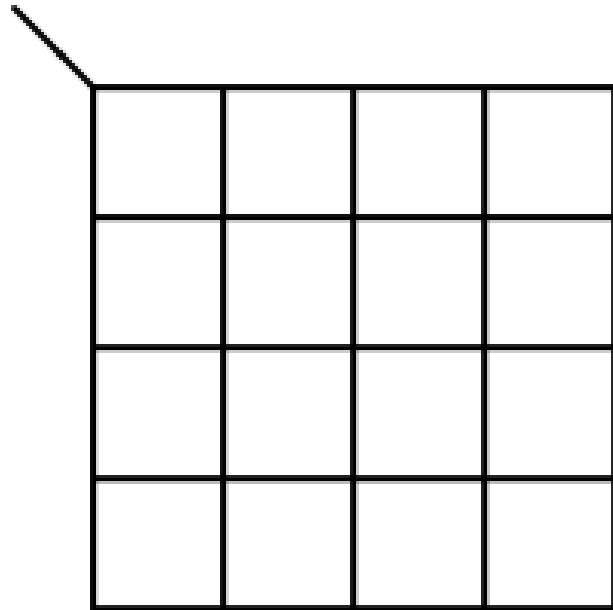


About how many hours did you spend actively working on this assignment? _____

1a. Truth Table

1b. Karnaugh Map



1c. Minimal sum of products expression:

$F(A,B,C,D) =$

2. Encoder

IN₀

IN₁

IN₂

IN₃

OUT₁ **OUT₀**
 (2's place) (1's place)

3. Switching Network (it fits here!)

A

B

C

D

S

4a. Cycles Completed	Q ₂	Q ₁	Q ₀	4b. Explanation (You do not need to fill this space.)
0 (initial)	0	0	0	
1				
2				
3				
4				
5				
6				
7				
8				
9				
10				

<p>5. Draw circuits on next page, text answers here.</p> <p>5b. Result =</p> <p>5e. (Brief!)</p>	<p>5c(i) Sign bit of A-B gives correct result for A<B. Example: A = B =</p> <p>5c(ii) Sign bit of A-B gives incorrect result for A<B. Example: A = B =</p> <p>Reason:</p>
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Other parts of 5 will be drawn on the following page.

5a(i-iv) Condition Flags, 5c(iii) Less-Than Flag, 5d Equals Flag. Label outputs clearly.

