

2)

suppose not. Consider 2 cases:

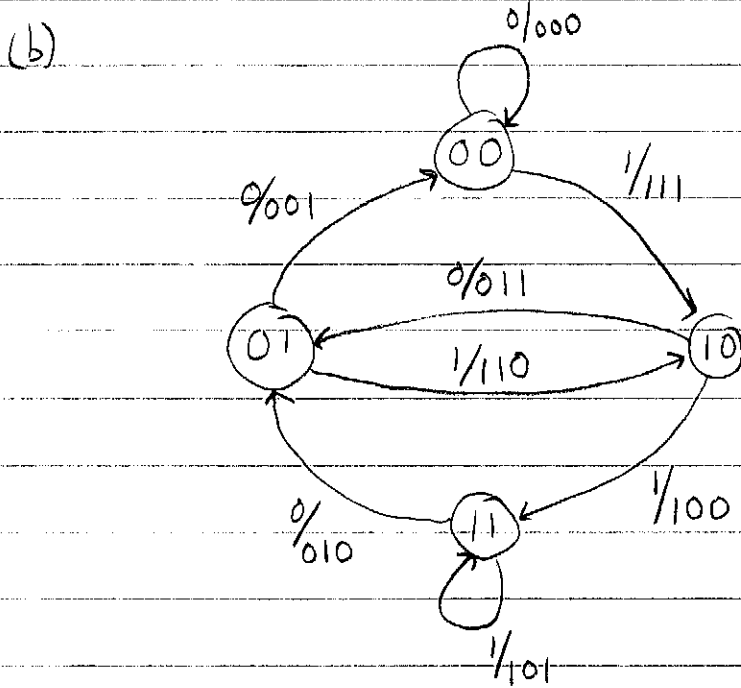
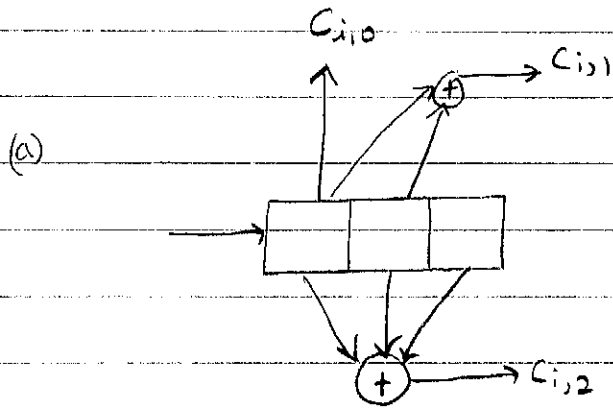
① $0 < \# \text{ odd wt} < \frac{|E|}{2}$

Pick one odd wt codeword and add it to every even wt. codeword. This yields more than $\frac{|E|}{2}$ distinct odd wt codewords - contradiction.

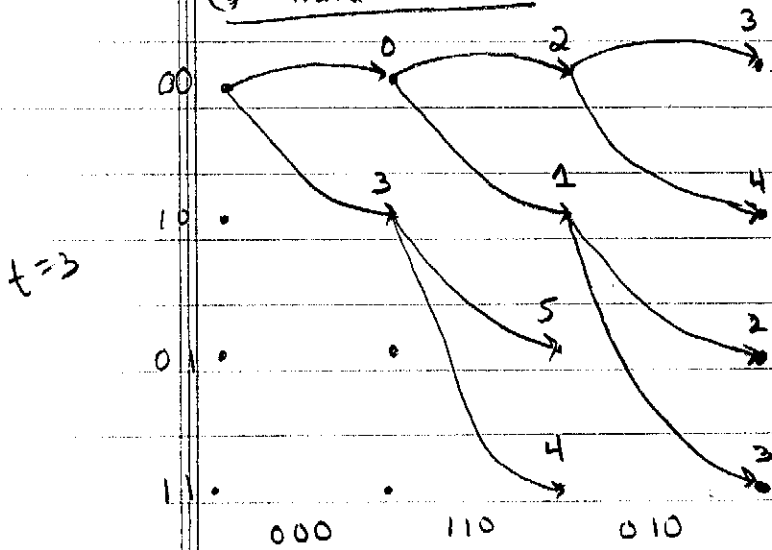
② $\frac{|E|}{2} < \# \text{ odd wt} \leq |E|$

Pick one odd wt codeword and add it to every odd wt. codeword (including itself). This yields more than $\frac{|E|}{2}$ distinct even wt codewords - contradiction.

3)

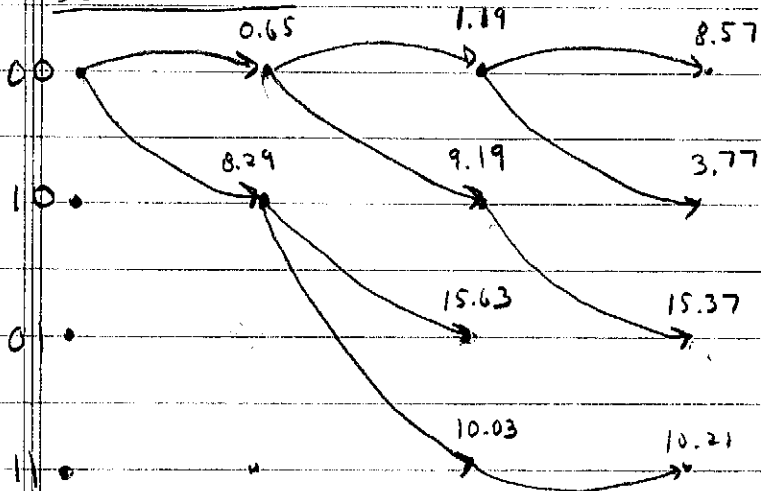


(c) hard-decisions

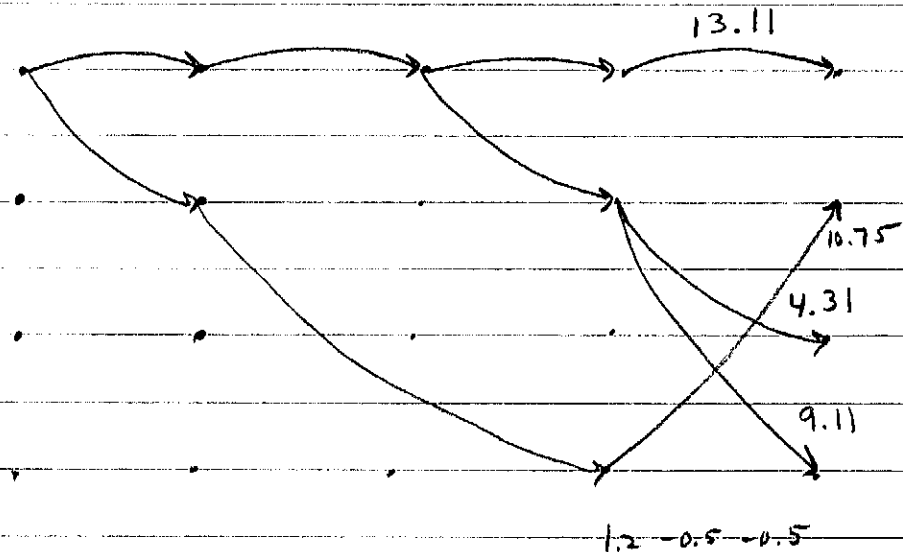


504-decisions

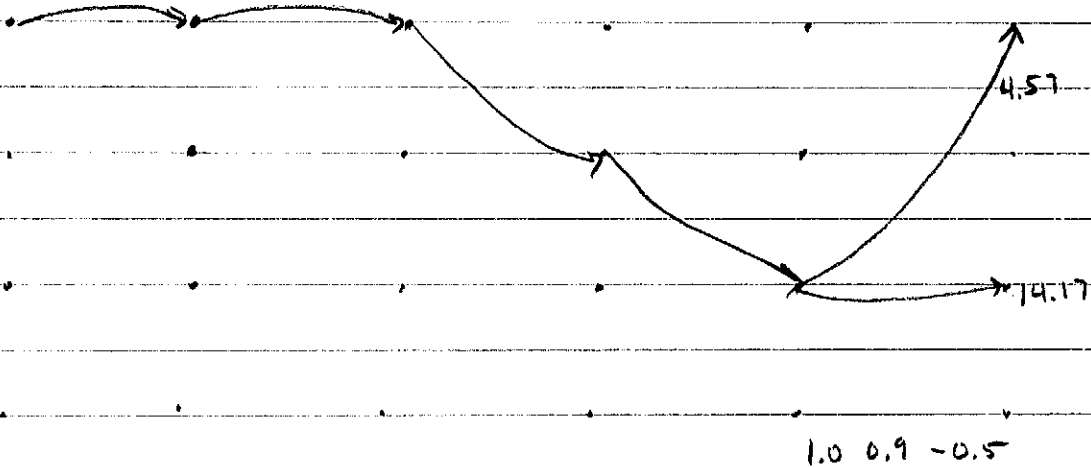
t=3



t=4



t=5



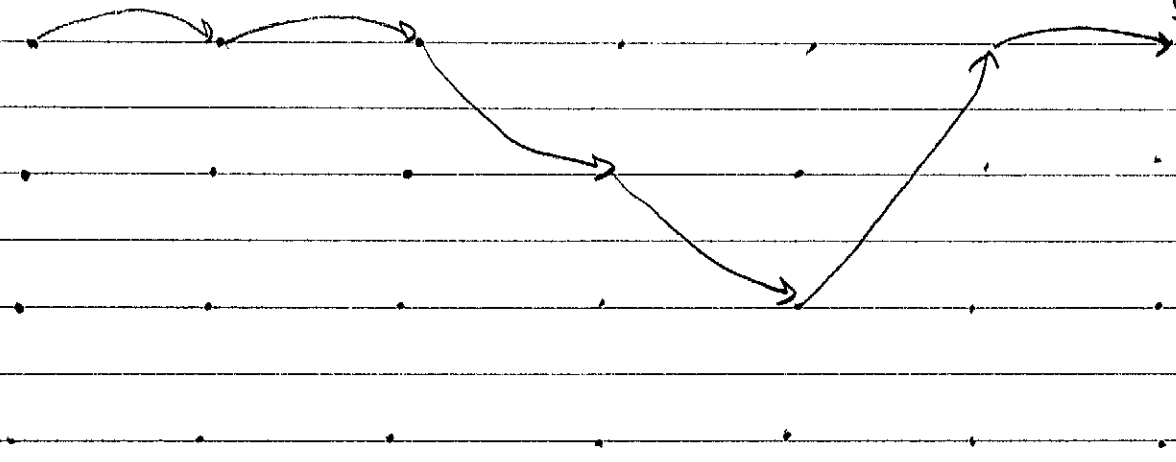
1.0 0.9 - 0.5

-6-

5.02

t=6

output



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