logical cannibals: determine a particular cannibal(C) always lies or tells the truth; ask that cannibal exactly one question

A) Why asking "Are you a liar?" is not helpful?

B) Is it possible to live? If no, prove one question not enough. If yes, the question.

"Are you either deceitful or truthful?": must be one of two given.

(D||T)>XOR?

D	T	
n	y	no can only be a liar, yes can only be truthful

Are you a liar?

y	indeterminate = true from liar or false from truthful
n	could be either true or false

4. encounter two knights or knaves, A and B. determine, if possible, what A and B are, if as below..

If you cannot determine what these two people are, can you draw any conclusions?

A: One reference for every two inputs?

	A		B		C		D		E	
	a	b	a	b	a	b	a	b	a	b
A) A says "At least one of us is a knave", B says nothing	0	0	0	0	0	0	0	0	0	0
B) A says "The two of us are both knights", B says "A is a knave"	0	1	0	1	0	1	0	1	0	1
C) A says "I am a knave or B is a knight", B says nothing	1	0	1	0	1	0	1	0	1	0
D) Both A and B say "I am a knight"	1	1	1	1	1	1	1	1	1	1
E) A says "We both are knaves", B says nothing										

5. 50 senators: given. How many honest and dishonest senators do you have in the senate?

Given:	t=50	(h||d) && (at least one honest) && (at least 1of2 dishonest)
(i) each either honest or dishonest	t=d+h	(h||d) = binary choice
(ii) at least one honest	h≥1	(at least one honest) = h≥1
(iii) in any two, at least one dishonest		(at least 1 of 2 dishonest) = h<2

Each given must be satisfied individually.

The only way to guarantee (iii) is to never have more than one honest senator.

solve for h; 1 ≤ h <2 = 1

solve for d; t-h = 50-1 = 49