

Liars

	M	T	W	H	F	S	SUN
A	L	L	L	T	T	T	T
B	T	T	T	L	L	L	T
A says: lied yest.	*			*			
B says lied yest.				*			*
A says truth yest.		*	*		*	*	*
B says truth yest.	*	*	*		*	*	

So, both will say they lied yesterday on Thursday only.

Both will say they told the truth yesterday on Tuesday, Wednesday, Friday, Saturday.

ABC; ABC-CBA = CAB

A is not 0 because it is larger than B and C.

Since $B - B = A$, it must be 0 or 9, so A is 9.

$C - 9 = B$, so $C + B = 9$ and $C < B$. $4 + 5 = 9$, $3 + 6 = 9$, $2 + 7 = 9$, $1 + 8 = 9$

Try $C = 4$ and it works.

$A = 9$

$B = 5$

$C = 4$

Strategies, guess & check, logic, write equations, change it to an addition problem.

Sam the snail

Sam starts at A which is one. To get to B there is still only one way. To get to C Sam can go from A to B then C or just from A to C. (2 Ways) To get to D Sam can go from A to B to D, A to B to C to D, or A to C to D. (3 Ways) To get to E Sam can go A to B to D to E, A to B to C to E, A to B to D to E, A to C to D to E, A to C to E. (5 ways). At this point you can see the Fibonacci sequence arising. You can then determine the 26th entry in the sequence. You should get there are 121,393 ways Sam can traverse the path from A to Z.