



LIQUIDITY ISSUE #5 - RESULTS FOR BRAIN TEASER COMPETITION



Starting Information

	1	Effie in odd numbered room	
	2	room is empty	
Empty	3	5 is right or 7 is wrong	FALSE
	4	effie is in even number room	
	5	either 2 is right or 4 is right	
Empty / Not empty	6	3 is wrong	TRUE (Empty / Not Empty)
	7	effie not in room 1	
Empty	8	Contains sludge, room9 is empty	FALSE
Not empty	9	contains sludge, room 6 is wrong	FALSE (Not Empty)

Assume 5 is wrong

	1	Effie in odd numbered room	
	2	room is empty	
Empty	3	5 is right or 7 is wrong	FALSE
	4	effie is in even number room	
Empty	5	either 2 is right or 4 is right	FALSE
Empty / Not empty	6	3 is wrong	TRUE
	7	effie not in room 1	
Empty	8	Contains sludge, room9 is empty	FALSE
Not empty	9	contains sludge, room 6 is wrong	FALSE

Assume 5 is wrong Assume 2 is wrong

	1	Effie in odd numbered room	
Not empty	2	room is empty	FALSE
Empty	3	5 is right or 7 is wrong	FALSE
	4	effie is in even number room	
Empty	5	either 2 is right or 4 is right	FALSE
Empty / Not empty	6	3 is wrong	TRUE
	7	effie not in room 1	
Empty	8	Contains sludge, room9 is empty	FALSE
Not empty	9	contains sludge, room 6 is wrong	FALSE

**Thus 2 cant be wrong as only empty rooms can be false and as such 5 cant be wrong, it must be right
As 2 is right 4 must be wrong
Thus 6 must be wrong must be empty**

	1	Effie in odd numbered room	
Empty	2	room is empty	TRUE
Empty / Not empty	3	5 is right or 7 is wrong	TRUE
Empty	4	effie is in even number room	FALSE
Empty / Not empty	5	either 2 is right or 4 is right	TRUE
Empty	6	3 is wrong	FALSE
	7	effie not in room 1	
Empty	8	Contains sludge, room9 is empty	FALSE
Not empty	9	contains sludge, room 6 is wrong	FALSE

**Either 5 is right or 7 is wrong
provd above that 5 is right
Therefore 7 is right**

Empty / Not empty	1	Effie in odd numbered room	TRUE
Empty	2	room is empty	TRUE
Empty / Not empty	3	5 is right or 7 is wrong	TRUE
Empty	4	effie is in even number room	FALSE
Empty / Not empty	5	either 2 is right or 4 is right	TRUE
Empty	6	3 is wrong	FALSE
Effie	7	Effie not in room 1	TRUE
Empty	8	Contains sludge, room9 is empty	FALSE
Not empty	9	contains sludge, room 6 is wrong	FALSE