### **Ants in a triangle probability question**

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**Question:** *You are at the Bank of Portugal. It has excellent security measures. There are 2 Locker Rooms. One contains 1000 tons of Gold, whereas the other is an unescapable Police Trap. You being the Professor, have found a loophole. The two guards securing the Gates are innocent and have a weird family tradition. One Guard never lies, and the other never speaks the truth. You are disguised as an older man and can ask them no more than a question before becoming suspicious. So what question do you ask any one of them and know the right room that contains the treasure and inform the gang can carry out the heist successfully?*

**Answer:**Ask any guard,“ What would the other guard say if I ask which way is to the Police Trap ?” And whatever answer he gives is the way to Treasure.

Explanation: If you end up asking the truthful one, he will speak the truth, and he knows that he knows that another guard will lie so that he will show the way to the treasure.

If you end up asking the question to the liar, he will lie about the other, and the answer will be the way to the treasure.