

A Couple of Logic Problems

For Beginners:

Going through a wood on the way to a strange town, you come to a fork with no signpost. By the road is a house in which you know there live two indistinguishably identical twin boys, one of whom always tells the truth and the other always tells a lie. Not knowing which will answer the door, what one question can you ask to discover the right way to town?

For Experts:

There are three guardians, A, B and C. Their names are Knight, Knave and Chaos. Knight always speaks truly, Knave always lies. Chaos tossed a coin this morning to decide whether today he would behave like Knight or like Knave.

Your task is simple: ask three yes-no questions, each of a single guardian, and determine which is Knight, which is Knave, and which is Chaos. There is, alas, a complication: the guardians understand English but will answer in the local language, in which “Da” means yes and “Ja” means no. Or possibly “Ja” means yes and “Da” means no – you cannot remember.

[<http://blogs.ft.com/undercover/2010/03/the-hardest-logic-puzzle-ever>]