

Lesson Last

What is the name of this book?

The riddle of Dracula and Other Logical Puzzles

by Raymond M. Smullyan

There are different types of logical problems. Riddles, mysteries, etc.

1

24 red socks and 24 blue socks are in a drawer in a dark room. What is a minimum number of socks I must take out of the drawer which will guarantee that I have at least two socks of the same color?

2

Problem of the Bear.

A man is 100 yards due South of a bear. He walks 100 yards due East, then faces due North, and fires a gun due North, and hits the bear. What color is the bear?

3

What happens if an irresistible cannonball hits an immovable post?

By an irresistible cannonball we shall mean a cannonball which knocks over everything in its way. By an immovable post we shall mean a post which cannot be knocked over by anything. So what happens if an irresistible cannonball hits an immovable post?

4

Two American Indians.

Two American Indians were sitting on a log—a big Indian and a little Indian. The little Indian was the son of the big Indian, but the big Indian is not the father of the little Indian.

How do you explain this?

5

Legal puzzle.

Two men were being tried for a murder. The jury found one of them guilty and the other one not guilty. The judge turned to the guilty one and said: "This is the strangest case I have ever come across! Though your guilt has been established beyond any reasonable doubts, the law compels me to set you free."

How do you explain this?

6

Problem of the Two Coins.

Two American coins add up to thirty cents, yet one of them is not a nickel.

7

A Real-Time Problem

A train leaves for Boston to New York. In an hour later, a train leaves from New York to Boston. The two trains are going at exactly the same speed. Which train will be nearer to Boston when they meet?

8

A Question of Grammar

Those of you who are interested in questions of good grammatical usage, is it more correct to say the yolk is white or the yolks are white?

9

A Question of International Law

If an airplane crashes right on the border of the United States and Canada, in which country would you bury the survivors?

10

A Question of Slope

On a certain house, the two halves of the roof are unequally pitched; one half slopes downward at an angle of 60° and the other half at an angle of 70° . Suppose a rooster lays an egg right on the peak. On which side of the roof would the egg fall?

11

The Island of Knight and Knaves.

There is a fictional island where all inhabitants are either [knights](#), who always tell the truth, or knaves, who always [lie](#). The puzzles involve a visitor to the island who meets small groups of inhabitants.

- 1) A visitor meets two people: A and B. He asks them who are they? A answers that he is either a knight or a knave, B says he is a knight. Is B a real knight?
- 2) There are two people. A makes a following statement: "At least one of us is a knave." What are A and B?
- 3) One of Smullyan's examples of this type of puzzle involves three inhabitants referred to as A, B and C. The visitor asks A what type he is, but does not hear A's answer. B then says "A said that he is a knave" and C says "Don't believe B; he is lying!" What are B and C?

(This is very interesting albeit confusing example: how about A?)

"The Lady, or the Tiger?" is a much-anthologized short story written by Frank R. Stockton for publication in the magazine *The Century* in 1882.

The Problems are from "The Lady or the Tiger? and Other Logic Puzzles" by Raymond M. Smullyan

The settings are adapted by a series of choice problems.

There once was a king in a far-off land who read Frank Stockton's short story [The Lady, or the Tiger?](#), in which a prisoner must choose between two rooms, one containing a lady and the other a tiger. If he chooses the former, the prisoner marries the lady; while if he chooses the latter, he (probably) gets eaten by the tiger.

Upon finishing this story, the king had an inspired flash. "That's the perfect way to try my prisoners!" he said to himself. "Only I won't leave anything to chance; I'll have signs on the doors of the rooms, and in each case, I'll tell the prisoner certain facts about the signs. If the prisoner is clever and can reason logically, he'll save his life ---- and may win a nice bride to boot!"

Not one to delay, the king implemented his new policy the very next day. The arena was prepared, and the following signs placed on the two doors.

Door 1	Door 2
Either a tiger is in this room, or a lady is in the other room.	A lady is in the other room.

One of the signs is True and the other is False.

Make your choice 😊