

Lecture 3: Worksheet



1 You throw two coins. By accident one of the coins has fallen under the furniture. The visible dice shows head. What is the probability that the other one is head too?

2 You throw two coins but do not see them. A friend shouts "At least one of the coins shows head". What is the probability that the other shows head too?

Solution:**Solution:**

The answer to the first question is $1/2$

The answer to the second question is $1/3$.

Remark.

This problem is equivalent to the problem posed by in 1959, by Martin Gardner: in the Scientific American.

- Mr. Jones has two children. The older child is a girl. What is the probability that both children are girls?
- Mr. Smith has two children. At least one of them is a boy. What is the probability that both children are boys?