

Using propositional logic: an example

- From *Lady or the Tiger? And Other Logic Puzzles Including a Mathematical Novel That Features Godel's Great Discovery* (Raymond M. Smullyan)
- Behind each door we may have either a lady or a tiger. One sign tells the truth but the other one no. Which door shall we open?

1. A lady is in this room
and a tiger is in the other

2. There is a lady in one room
and a tiger in the other



Another variation

- There are one lady and two tigers. At most, one sign tells the truth. Which door shall we open?

1. There is a tiger
in this room



2. There is a lady
in this room



3. There is a tiger
in room 2

