

The Three Prisoners

Three mathematicians were thrown into prison for a crime they did not commit. Their jailer decided to play a little game with them. "I will blindfold you and take you into a room" said the jailer. "In the room will be a table with five small hats. Three of the hats are white, and two are red. You will each pick a hat at random and place it on your head. I will take you out of the room and remove your blindfolds one by one. You will not be able to see your own hat, but will be able to see the hats on the other two men. If you can tell me the color of your own hat I will set you free. But if you guess wrong, I will put you to death. If you cannot tell, you will serve out your sentence."

The men agreed, and were blindfolded. Each picked out a hat. They were taken out of the room, and the blindfold was removed from the first man. He looked at the hats on the other two men and thought for a while. Finally he said "I am sorry, but I cannot tell the color of my own hat".

The blindfold was removed from the second man. He looked at the hats on his friends, and thought hard for a long time. "I confess", he said, "that I cannot tell the color of my own hat".

The jailer, about to remove the blindfold from the third man, was surprised when the third man said "There is no need to remove my blindfold. I Know what color my hat is".

What color was it, and how did he know?