Here I will describe the solution to the following logic problem:

Three smart people and five hats:

There are 5 hats in a dark closet: 3 are red and 2 are blue. Three smart people go into the closet, put on hats, and come out. They cannot see their own hats.

The first person says, "I can see the other two peoples' hats, but I cannot determine my own."

The second guy says the same thing.

The last guy is blind, but he says, "I know exactly what color hat I'm wearing."

What color hat is the blind man wearing?

Solution. Let A, B, C be the three people, where C is the blind person. We will need to keep in mind that neither A nor B can know what their own respective hats are. So let's consider the possible hat colors A can see on B and C. If B and C were both wearing blue hats, then, since there were only 2 blue hats to start with, that leaves only red hats for A to wear. Thus A would have to know he is wearing a red hat, contradicting the condition that A cannot know his hat color. Keep this in mind. Now consider what B might see. If B sees that C is wearing a blue hat, then, by the fact that A cannot know what his hat color is, B cannot also be wearing a blue hat. This is because if C is wearing a blue hat and B is wearing a blue hat, A would then know his own hat is red. Therefore, C cannot possibly be wearing a blue hat. It follows that C must be wearing a red hat.