

More Logic Puzzles

Question 1. There are three men whose last names are Brown, Smith, and Jones. One of the men is a doctor, one is a lawyer, and one is a teacher. They each earn a different amount of money for their jobs. Also,

1. The teacher, who is an only child, earns the least amount of money.
2. Mr. Smith married Mr. Brown's sister. Mr. Smith also makes more money than the lawyer.

What is each man's job?

Question 2 (Again). Three very smart women are standing in a line, and all of them are facing the same direction. The Mad Hatter has three blue hats and two red hats and he randomly puts one hat on each woman's head. The women knew that the Mad Hatter started with three blue hats and two red hats, but they do not know which two hats were left over. The woman in the back of the line can see the hats of the two women in front of her, but she cannot see her own hat. The second woman in line can see the hat of the woman in front of her, but she cannot see her own hat or the hat of the woman behind her. The woman in front of the line cannot see any hats.

First, the woman in the back of the line was asked if she could determine what color hat she was wearing, and she said he could not. Next, the second woman in line was asked if she could determine what color hat she was wearing, and she also said she could not. Finally, the woman in the front of the line, who had heard what the last two women had said, said that she knew what color hat she was wearing. What color was it and how did she know?

Question 3. There are three boxes on a table. One of them is labeled APPLES, one is labeled ORANGES, and one is labeled APPLES AND ORANGES. Unfortunately, each of the boxes is mislabeled. You can reach into each of the boxes, but you cannot see what is inside any of them. Is it possible to pick ONE piece of fruit from ONE of the boxes and then correctly relabel all of the boxes?

Question 4. Rabbit is having Winnie the Pooh over for tea, and decides that he should hide his honey pot. Rabbit has three boxes of different colors, and he puts the honey in one of the boxes. He labels the boxes as follows:

1. Red Box: There is no honey in here.
2. Blue Box: The honey is in here.
3. Green Box: The honey is in the blue box.

Unfortunately, Rabbit cheated, and only one of the labels on the boxes is true. Where can Winnie the Pooh find the honey?

Question 5. A drawer contains 7 red socks, 8 blue socks, and 10 black socks. It is dark, and you can't tell what color any of the socks is. What is the smallest number of socks you can pull out of the drawer to guarantee that you get a pair of matching socks?

Question 6. A farmer is out on a walk with his pets: a dog, a cat, and a bird. He comes to a river, and there is a raft that he can use to get across the river. Unfortunately, there is only enough in the raft for the farmer and one of his pets. He cannot leave his dog and cat alone because they will fight, and he cannot leave the cat alone with the bird because the cat will eat the bird. If the farmer can take the raft back and forth across the river as many times as he wants, can he safely bring all three of his pets across the river?

Question 7 (For next week). Using a scissors, cut a hole in an ordinary piece of paper ($8.5'' \times 11''$) through which any one of your classmates could walk through.