I’ll Let You Go Free

The warden at Shawshank Prison decides to let some prisoners go free, on the condition that they pass a small test. He takes three inmates and puts them in a room seated in chairs so that they face one another. He enters the room with a box containing three red hats and two white hats. He tells the inmates, “In this box, I have three red hats and two white hats. Without your knowledge as to the color, I will randomly choose a hat from this box, and place it on your head. You will not know the color of the hat on your head – at first, maybe.

I will then remove the box with the remaining hats so that no one can tell from those remaining what their hat’s color is. I will then ask each of you what color your hat is. The first one that answers correctly will go free. You cannot guess, you must tell me how you know the color.”

After placing the hats and removing the box, the warden questions the inmates. He asks the first inmate what color his/her hat is. The inmate replies that he/she cannot tell. The warden asks the second inmate what color his/her hat is. The second inmate looks at the first inmate and the third inmate and says “I don’t know.” The warden says to the third inmate, “Well, I guess it’s down to you. What color is your hat?” The third inmate answers and is correct, but is blind. What color was his/her hat and why?

Farming Ducks and Cows

Farmer Ben:

Farmer Ben has ducks and cows. He can’t remember how many of each he has, but he really doesn’t need to remember. He knows that he has 22 animals, which is his age. He also remembers that those animals have a total of 56 legs, which is his father’s age. Assuming that each animal is normal, how many of each does Farmer Ben have?

Farmer Jones:

Former Jones raises ducks and cows, too. She remembers having 54 animals with 122 feet. Assuming that each animal is normal, how many of each does Farmer Jones have?
Meeting People

Basketball League:
A new basketball league was formed in which each of the teams will place three games against each of the other teams. There are seven teams: the Antelopes, the Bears, the Cardinals, the sunDevils, the Eagles, the Foxes and the Wildcats. How many games will be played in all?

Handshakes
At a party there are 10 people. If each person shakes hands with everyone else only once, how many handshakes will there be?

At a party there are n number of people. If each person shakes hands with everyone else only once, how many handshakes will there be?

Coyotes and Jackals
Three jackals and three coyotes are on a trek across the Mokalani Plateau when they come to a river filled with carnivorous fish. There is a rowboat in sight, and the party decides to use it. (Both species are known for their cleverness, regardless of how much this problem exceeds reasonableness.) However, the boat is too small for any more than two of the group at a time. So they must traverse the river in successive crossings. There is one hitch, though. The jackals must not outnumber the coyotes at any time, in any place. It this happens, for example, that there are two jackals on the western bank, and only one coyote, then this problem is reduced to simple subtraction and gluttony. (The jackals will overpower and kill the coyote.) It's okay to have an equal number of each and it is okay to have more coyotes than jackals in a given place. Neither situation poses a danger to the coyotes, nor do the coyotes pose a threat to the jackals. So the trick here is to use the one small rowboat, a lot of sweat, and a little brainpower to assure the coyotes' survival while both groups cross the river.
Penny’s Dimes

Penny’s favorite coin is the dime. She knows she has less than 100 dimes, but does not know how many. One day she was arranging them on her desk in different ways and she found that when she put them into piles of two there was one left over. When she put them into piles of three there was one left over. The same thing happened when she put them into piles of four. She then tried putting them into piles of five and found that there were non left over. How many dimes does penny have?

Dad’s Money?

On Wednesday Dad got paid. Thursday morning my brother took half the money to go open a checking account (because he is always short on money). On Friday, I needed some for a date, so I took half of what remained. Sis came along next and took just half of the remaining money. Dad then went to gas up the car and used just half of the money, and wondered where it all went so fast. He had only $5 left. How much money did he start with in his wallet?
What Day?

If the Ten-Thousand-Day War started on a Wednesday, on which day of the week did it end?

I turned 30 on a Friday this last November, what day of the week was I born?