

Problems for January 16, 2010

1. Two students can play guitar and the third - banjo. What is Mary's instrument, if Mike and Peter play different instruments; while Mary and Peter also play different instruments?
2. When Anna, Gene and Nina asked their math teacher about their grades on a quiz, the teacher said: "Try to figure it out on your own, if I just say that one of you has A, another B, and the third C and: Anna does not have C while Nina has neither C nor A." Can you tell what their grades were?
3. Nina, Valerie, Josh, Mary and Jack are picking fruit. Three of them are picking apples and the other two pears. Jack and Mary are picking the same kind of fruit, Mary and Valerie - different kinds of fruit and Valerie and Nina - also different kinds of fruit. Can you tell who is picking what?
4. Mr. Frog was greeting his guests. Mrs. Fox arrived earlier than Mr. Bear, Mrs. Wolf - later than Mr. Hare, Mr. Bear - earlier than Mr. Hare and Mrs. Crow arrived later than Mrs. Wolf. What was the order of arrival of these guests?
5. Three friends were sitting near a pond and talking to each other. One of them had last name Turner, the second Locksmith and the third Carpenter. One of them had a father who was a carpenter, another a father who was a turner and a third friend's father was a locksmith. "It is funny" - said the friend whose father was a locksmith, - "that none of our fathers has the job which corresponds to his last name." The friend whose last name was Carpenter thought a bit and said: "Oh yeah, you are right!" Which of the fathers has which job?
6. Once upon a time, in one castle there lived four happy princesses: Natalie, Olga, Diana and Margaret. They liked to laugh. The servants had heard that they laughed non-stop for 2, 5, 7 and 10 minutes. Natalie could not laugh for more than 2 minutes, Margaret laughed for 10 minutes, Olga laughed less than Diana. How many minutes did each princess laugh?
7. Five boys were sitting at a round table in coffee shop in Hawaii. Their names were George, Tony, Alex, Nick and Victor. They came from: Seattle, Austin, New York, Chicago and Atlanta. It turned out that: (a) the boy from Austin was sitting between George and Tony, and across the table from him were the boy from Chicago and Alex, (b) Nick has never been to Austin, (c) George has never been to Seattle and Atlanta, (d) the boy from Atlanta and Tony are friends on Facebook. What city does each of the boys live in?
8. Four people were traveling in the same compartment of a train: an astronomer, a poet, a writer and a playwright. Each of them had a book written by one of the other passengers. The poet was reading a play. The writer was very young: he just had his first book published and he claimed that he never reads anything on astronomy. None of them was reading his own book. Who was reading what?
9. In a small town's shopping mall all stores are closed on Sunday but, in addition, the shoe store is closed on Monday, the hardware store - on Tuesday, tea store - on Thursday and the perfume store is only open on Monday, Wednesday and Friday. One day Jeremy, Natalie, Alyssa and Gene have driven together to the mall. Each of them has visited exactly one of the four stores, and each of the stores was visited by exactly one of them. On their way, they exchanged the following remarks. Jeremy said: "Gene and I wanted to go shopping earlier this week, but we couldn't find a day when both of us could buy what we need." Natalie said: "I didn't want to go today but tomorrow I cannot buy what I need." Alyssa said: "I could also go shopping yesterday, and the day before yesterday." Finally, Gene said: "I could also go shopping yesterday or tomorrow." What store did each of them need?

