



## White Level

1. (6 credits) Three pokemon trainers Ash, Misty and Brock went for a walk with their pets: Pikachu, Geodude and Togepi. It is known that Geodude's trainer is not a girl, Misty is allergic to Pikachu's hair, and Brock calls his pet 'Dude'. Who is Pikachu's trainer? Prove it.

2. (6 credits) Mary Poppins has 5 unused vacation days. Weekends and holidays are marked red (in the frame) in Fig. 1. What is the maximum number of subsequent calendar days of rest she may have?

Понедельник Monday	Вторник Tuesday	Среда Wednesday	Четверг Thursday	Пятница Friday	Суббота Saturday	Воскресенье Sunday
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	1	2	3	4	5

Fig. 1

4. (10 credits) Hermione wanted to buy a bookshelf. She came to the store with a tape measure and measured the bookshelf she liked. The thickness of each of the side walls of the bookshelf and each of the two partitions was 1.5 cm, and the distances between the side walls and the partitions were the same everywhere and were equal to 30 cm. What was the width of the bookshelf?

5. (10 credits) Lyra Belacqua has three cans of Dust: two full cans and one partially filled can. Each can full of Dust weighs 1.7 kg, an empty can weighs 200 g. What is the weight of Dust (in kg) in the third can, if the total weight of three cans is 4.5 kg?

6. (10 credits) Alice loves to solve puzzles. When she asked her elder sister about her age, the sister answered that now she is 4 times older than Alice, and 2 years later she will be 3 times older. What is the age of Alice's sister?

7. (10 credits) A figure consisting of squares only is shown in Fig. 2. The length of each side of the smallest square is 1 cm. What is the perimeter of the whole figure?

8. (12 credits) The Wizard of Oz and Dorothy decided to fly an air balloon and took a basket with three kilograms of food to have something to eat during their journey. To get off the ground, they dropped 5 sandbags, each of which weighed 18 kg. What was Dorothy's weight, if the Wizard is 20 kg heavier than the girl?

9. (12 credits) In our world, kings and queens of Narnia Peter, Susan, Edmund and Lucy Pevensie live in the same street. The distance between houses of Edmund and Peter is 400 meters, between houses of Edmund and Lucy – 750 meters, between houses of Susan and Lucy – 650 meters. Owners of the houses in these pairs are not neighbours. What is the distance between houses of Susan and Peter?

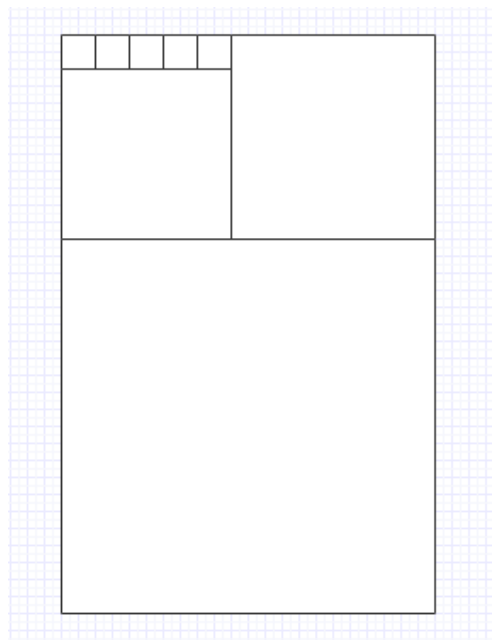


Fig. 2

10. (18 credits) Scrooge McDuck changed the PIN of his bank card, but when he tried to withdraw money from an ATM, it turned out that he forgot the new PIN. When Scrooge decided to change the PIN, he chose such number of four different digits that first two digits and last two digits of the PIN were squares of natural numbers, and the sum of inside digits of the PIN was equal to the sum of outside digits. Scrooge listed all possible combinations and at last decided to try the smallest number meeting the mentioned conditions. Fortunately, the PIN happened to be correct. What number was chosen by Scrooge McDuck as the PIN?