First Name: $\qquad$ Last Name: $\qquad$

## Problem 1.

Zita walks from the left to the right and puts the numbers in her basket. Which of the following numbers can be in her basket?

A) 1, 2 and 4
B) 2, 3 and 4
C) 2, 3 and 5
D) 1,5 and 6
E) 1,2 and 5

## Problem 2.

The combination for opening a safe is a three digit number made up of different digits. How many different combinations can you make using only digits 1,3 and 5 ?
A) 2
B) 3
C) 4
D) 5
E) 6

## Problem 3.

In the square below the numbers 1,2 and 3 must be written in the cells. In each row and in each column each of the numbers 1,2 and 3 must appear. Harry started to fill in the square. Which number can be written in the cell with the question mark?

| 1 | $?$ |  |
| :--- | :--- | :--- |
| 2 | 1 |  |
|  |  |  |

A) only 1
B) only 2
C) only 3
D) 2 or 3
E) 1, 2 or 3

## Problem 4.

Daniela has got cubes with their edges 1 inch long. She has put some of them into the aquarium in the shape of a cube with the edges measuring 3 inches in the way you see on the picture. What maximum number of further cubes can she put into the aquarium?

A) 9
B) 13
C) 17
D) 21
E) 27

## Problem 5.

What is the piece that fits together with the given one to form a rectangle



C)



Problem 6.
A palindrome is a number which remains the same when its digits are written in reverse order. For example 1331 is a palindrome. A car's odometer reads 15951. Find the least number of kilometer required for the next palindrome to appear.
A) 100
B) 110
C) 710
D) 900
E) 1010

