First Name: \_\_\_\_\_\_ Last Name: \_\_\_\_\_\_

## Problem 1

Jacky wants to insert the number 3 somewhere between the digits of the number 2014, to make a five-digit number that is as small as possible. Where should Jacky insert the number 3?

(A) in front of 2014	(B) between the 2 and the 0	
(C) between the 0 and the 1	(D) between the 1 and the 4	(E) at the end of 2014

## Problem 2

The rooms in Kanga's house are numbered. Baby Roo enters the main door, passes through some rooms and leaves the house. The numbers of the rooms that he visits are always increasing. Through which door does he leave the house?



(A) A	(B) B	(C) C	(D) D	(E) E
<b>\ /</b>	( )	( )	( )	( )

# Problem 3

The sum of the digits of the number 2014 is 7. How many numbers between 100 and 1000 also have 7 as the sum of their digits?

(A) 3 (B) 18 (C) 20 (D) 28 (E) 36

### Problem 4

Tom added all even numbers from 2 to 100. Alice added all odd numbers from 1 to 99. Then Joe subtracted Alice's result from Tom's result. What is Joe's result?

(A) 50 (B) 150 (C) 10 (D) 200 (E) 100

### Problem 5

A number has two digits. The product of the digits of this number is 15. What is the sum of the digits of this number?

(A) 2 (B) 4 (C) 6 (D) 7 (E) 8

First Name: \_\_\_\_\_\_ Last Name: \_\_\_\_\_

## Problem 1

How many different numbers greater than 12 and smaller than 58 with distinct digits can we make by using any two of the digits 0, 1, 2, 5, and 8?

(A) 3 (B) 5 (C) 7 (D) 8 (E) 9

# Problem 2

Lois wants to write the numbers from 1 to 7 in the grid shown. Two consecutive numbers cannot be written in two neighbouring cells. Neighbouring cells meet at the edge or at a corner. What numbers can she write in the cell marked with a question mark?



(A) all seven numbers

(B) only odd numbers

(C) only even numbers

(D) only number 4 (E) only the numbers 1 or 7

# Problem 3

Monica writes numbers in the diagram so that each number is the product of the two numbers below it. Which number should she write in the grey cell?



### Problem 4

Nick has written each of the numbers from 1 to 9 in the cells of the  $3 \times 3$  table. Only four of these numbers can be seen in the figure. Nick has noticed that for the number 5, the sum of the numbers in the neighbouring cells equals 13 (neighbouring cells are cells sharing a side). He noticed the same applies to the number 6. Which number has Nick written in the shaded cell?

1	2
4	3

(A) 5 (B) 6 (C) 7 (D) 8 (E) 9

## Problem 5

Aline writes a correct calculation. Then she covers two digits which are the same with a sticker:



Which digit is under the stickers?



# Problem 6

Emily added two 2-digit numbers correctly on paper. Then she painted out two cells, as shown below.



What is the sum of two digits in the painted cells?

(A) 5 (B) 7 (C) 8 (D) 9 (E) 13