WPC French qualification
September 3rd, 2005 – Booklet

1 Timetable

Round	Beginning	End	Maximum points
Round 1	10.15	11.45	250 points
Round 2	11.55	12.30	150 points
Round 3	14.30	16.00	250 points
Round 4	16.15	18.00	210 points

2 Round 1 – WPC Classics – 90 minutes

2.1 Rectangles 10+10 points

Divide the grid into rectangles so that each rectangle contains exactly one number, and so that each number represents the number of squares of its corresponding rectangle.

2.2 Domino Hunt 40 points

A complete domino set (55 dominos from 0-0 to 9-9) has been placed in the grid. The sides of the dominoes have been erased and the spots have been replaced by numbers. Draw the edges of the dominoes in the grid.

2.3 Mirrors 5+10 points

Place ten diagonal two-faced mirrors (each the size of a square) in each grid, in such a way that the trajectory of a ray of light emitted straight into the diagram from anywhere on its boundary passes through a number of squares equal to the given value.

2.4 Skyscrapers 5+10 points

Each grid symbolizes a group of skyscrapers. Each row and column contains skyscrapers of different heights (1-5). The numbers outside the grid indicate how many skyscrapers are visible from that direction (a building located behind a taller one in the same row is completely hidden).

2.5 Tri-Squares 10+15 points

Place the numbers 1 to 15 into each grid, in order, so that each number is in the same row or column as the number preceding it. The resulting path may cross or double-back on itself, and successive numbers need not be adjacent. There must be exactly three numbers placed in each row and column. The numbers outside the grid reveal the sum of the numbers in the corresponding row or column.

2.6 Meanders 10+15 points

Locate the route, starting in the upper left corner and finishing in the lower right corner of each grid. The route meanders horizontally or vertically, and the numbers outside each grid indicate the total of occupied squares in that row or column.

2.7 Fences 5+10 points

Draw a single continuous loop by connecting neighboring dots horizontally or vertically (but not diagonally). A numbered square indicates exactly how many of its four edges are used in the loop.

2.8 Tents 5+10 points

Locate the tents in each grid. Each tree (symbolized by T in the diagram) is connected to exactly one tent, found in a horizontally or vertically adjacent square. Tents do not touch each other, not even diagonally. The numbers outside the grid reveal the total number of tents in the corresponding row or column.

2.9 Hungarian Count 40 points

Listed below are numbers in Hungarian. Pack these words into the grid, reading either across (left to right) or down (top to bottom). Ignore accents and diacritical marks (also treat GY and NY as two letters each, even though they are considered as single letters in Hungarian). Each square contains a letter and no square is used more than once. Some letters are already placed.

2.10 Loopfinder 5+10 points

Draw a continuous loop of straight sections such that: the loop connects the middles of the squares, and may turn only at middle points of squares ; the loop must not cross or overlap itself and must visit all squares. Some parts are already given.

2.11 ABC Connect 10 points

Connect the same letters with an unbroken line. The lines can pass only through the middles of the squares and cannot overlap nor cross each other.

2.12 Number Crossword 15 points

Enter digits from 1 to 9 into the grid, one per square, so that the digits in each series of empty squares multiply up to the number in front of, or above the series.

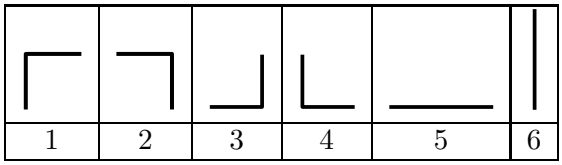
No digit in ever repeated in a continuous series of digits, and all the digits are used exactly twice in the whole grid.

3 Round 2 – Medley – 35 minutes

3.1 Alternate Corners 15 points

Draw a continuous loop in such a way that every second corner point should be in a square containing a circle. The loop crosses each square exactly once and must not intersect or overlap itself anywhere. The loop must turn when it passes through a square containing a circle.

Translate the contents of the squares a, b, c, and d into figures as shown. They will be used in Problem 6.

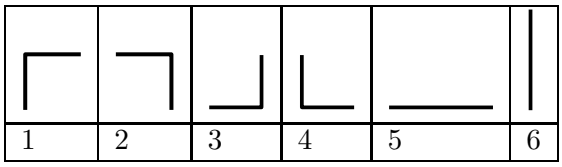


$\Longrightarrow$

a	b	c	d

3.2 Loopfinder 15 points

Draw a continuous loop of straight sections such that: the loop connects the middles of the squares, and may turn only at middle points of squares ; the loop must not cross or overlap itself and must visit all squares. Some parts are already given.



$\Longrightarrow$

g	h	j

3.3 Sudoku 15 points

Fill digits 1-9 into the grid in such a way that every digit appears once in each row, each column, and each black-edged 3x3 region.

Copy the values in squares m to p. They will be used in Problem 6.

m	n	o	p

3.4 Sum Skyscrapers 15 points

The grid symbolizes a group of skyscrapers. Each row and column contains skyscrapers of different heights (1-5). The numbers outside the grid indicate the sum of the heights of the visible ones from that direction (a building located behind a taller one in the same row is completely hidden).

Copy the values in squares r to u. They will be used in Problem 6.

r	s	t	u

3.5 Half Dominoes 15 points

Put the nine half dominoes into the puzzle grid in a way that the sum of the dots in the rows, columns and diagonals is equal to the clues outside the grid. The pieces may not be rotated or mirrored.

The values x, y, z are, in order, the values of the half-dominoes of the middle line of the grid. They will be used in Problem 6.

x	y	z

3.6 All Alone 30 points

Black out some of the numbers in the grid so that each row and each column contains only different digits. Black squares must not touch horizontally or vertically, and the remaining squares must all be connected to each other. Complete with the numbers given in the five first problems.

A black (resp. white) square labelled by a letter L becomes a black (resp. white) square in the next problem.

α	β	γ	δ	ϵ

3.7 Black and White 25 points

Fill each square with either a black or a white circle. All the squares containing black circles must be connected to each other horizontally or vertically. Similarly, all the squares containing white circles must be connected to each other horizontally or vertically. No 2x2 region can contain four circles of the same colour. Complete with the five squares coming from the previous problem.

A black square labelled by a roman letter becomes a black square in the next problem. A white square labelled by a roman letter is a square occupied by a digit in the next problem.

A	B	C	D

3.8 Easy as 1234 20 points

Place the digits 1, 2, 3, and 4 in the grid so that in every horizontal and vertical line, each digit appear exactly once. The digits outside the grid indicate the first digit seen from that direction. Complete with the data of occupied and non-occupied cells coming from the previous problem.