WPC French Pre-qualification
February 3rd, 2007 – Booklet

Timetable

Round	Beginning	End	Maximum points
Round 1	14.00	15.30	900 points
Round 2	15.45	17.00	750 points
Round 3	17.15	18.30	750 points

In all rounds, a candidate with all correct problems before the end of the round will be credited 5 points for all remaining full minute.

1 Round 1 – 90 minutes – 900 points

1.1 Alternate Corners 35+65 points

Draw a continuous loop in both grids 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.

1.2 Battleships 15+25 points

Each grid represents a part of the ocean in which a fleet of eight ships is hiding, which composition is given next to the grid. The ships may be oriented horizontally or vertically, and no two ships can occupy adjacent cells, not even diagonally. The digits indicate the number of cells in the corresponding rows and columns that are occupied by parts of ships.

1.3 Minesweeper 25+35 points

There are 24 mines in each diagram, at most one in a given square. The numbers inside the diagram indicate the number of mines that can be found on the squares immediately adjacent to that square (horizontally, vertically, or diagonally). Squares with a number do not contain mines.

1.4 Domino Hunt 50+70 points

A complete domino set (28 dominos from 0-0 to 6-6) has been placed in both grids. The sides of the dominoes have been erased and the spots have been replaced by numbers. Draw the edges of the dominoes.

1.5 Skyscrapers 20+70 points

Each grid symbolizes a group of skyscrapers. Each row and column contains skyscrapers of different heights (1-5) (1-6 in the second puzzle). 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).

1.6 Museum — 40+50+50 points

The floor indicated by a grid is divided in rooms, all interconnected by doors. Some doors are opened, the others are closed. Each room displays a number which indicates how many rooms (including itself) can be seen from it. Draw the closed doors.

1.7 Rectangles — 10+20+20 points

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

1.8 Square Routes — 30+50 points

Draw a single closed loop in both grids, crossing each square exactly once. The loop runs either horizontally or vertically and must not intersect or overlap itself anywhere. The path must make a turn on the circles and make a straight line on the crosses.

1.9 Tents — 40+55+60 points

Locate the tents in the three grids. 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.

1.10 Sudoku — 65 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 region.

2 Round 2 – 75 minutes – 750 points

2.1 Arrows 35+40 points

Insert arrows in the empty squares of each grid. All arrows point towards the grid, and the numbers inside the grid indicate the number of arrows pointing at them.

2.2 Black and White 10+10 points

Fill each square of each grid 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.

2.3 End View 10+10+15 points

Fill in the numbers 1, 2, and 3, in the diagram. Each number occurs once in each row and column. The numbers outside the diagram indicate the first number you come across from that direction.

2.4 Half-Dominoes 30 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.

2.5 Fences 40+50 points

Draw a single continuous loop in each grid 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.

2.6 Hiroimono 25+45 points

Beginning at the circled square numbered 1, enter consecutive numbers into all vacant circled squares, moving inside the diagram according to the following rules: between two consecutive numbers, you must move in a straight

line either horizontally or vertically along the edges of the diagram; you can change directions after entering a number, but you cannot make a U-turn; you must enter numbers in all the vacant intersections that you encounter.

2.7 Mirrors 25+25+25 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.

2.8 Loopfinder 10+10+25 points

Draw a single closed loop in each grid, crossing each square exactly once. The loop runs either horizontally or vertically and must not intersect or overlap itself anywhere. Some parts are already given.

2.9 Star Battle 50+80 points

Place two stars, the size of one square, in each column, each row, and each black-edged region of each grid. The stars do not touch each other, not even diagonally. The black squares do not contain a star.

2.10 Link a Pix 50+60+70 points

Link all numbers in pairs of the same value by a path whose length must be equal to the numbers. Two paths cannot have a square in common.

3 Round 3 – 75 minutes – 750 points

3.1 Light Bulbs 10+10+30 points

Put 16 light bulbs in each grid so that no light bulb enlightens another light bulb (rays go only horizontally and vertically). The light bulbs do not touch each other, not even diagonally.

3.2 Bitriminos 20+35+35 points

Divide each grid into dominoes or L-triminoes so that the sum of the numbers inside each tile is 5.

3.3 Word Search 30+30 points

Divide each grid into straight blocks and fill each square with letters so that one can read exactly once all the given words from left to right or top to bottom inside the blocks.

3.4 Coral Finder 20+20+25 points

Select a connected set of squares (the coral) so that it does not touch itself, not even diagonally. Numbers outside the grid indicate the lengths of consecutive parts of the coral in the given row or column. However, numbers are not written in the order they appear in their respective row or column. No 2×2 area can be covered by the coral.

3.5 L-Pond 10+10+20 points

Divide each pond into L-triminoes so that no trimino contains twice the same digit. The black squares do not belong to the pond.

3.6 Meanders 15+25+30 points

Locate the route starting in the top left square and ending in the bottom right square. The route meanders horizontally or vertically, and the numbers outside the grid indicate the number of occupied squares in that row or column.

3.7 Metro — 50+50 points

Reconstruct the subway network from the puzzle. Subway lines do not reach the boundary of the figure and there is no dead end in the network. The composition of each row and column is given.

3.8 Pills — 10+15+25 points

Eight pills with a size of three horizontally or vertically connected squares are placed in each grid. The pills have all different values from 0 to 7. The values next to the grid indicate the sum of the values of the pills in that row or column.

3.9 Scanner — 40+50+60 points

Fill in each grid with numbers so that no equal numbers are next to each other horizontally or vertically. The composition of the rows and column are given.

3.10 Stellute — 25+25+25 points

Put two stars in each row and column of each grid so that the numbers outside indicate the number of empty cells between the stars of the corresponding row or column. The stars do not touch each other, not even diagonally.